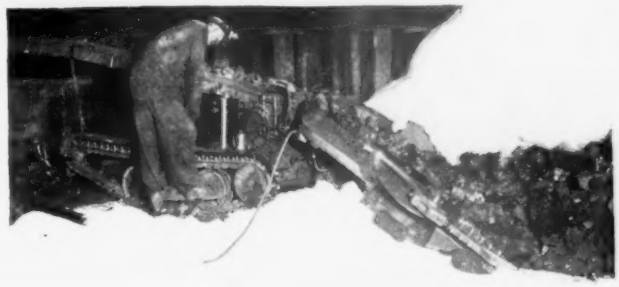
The MINING CONGRESS JOURNAL

Volume 9 AUGUST, 1923 *Number* 8



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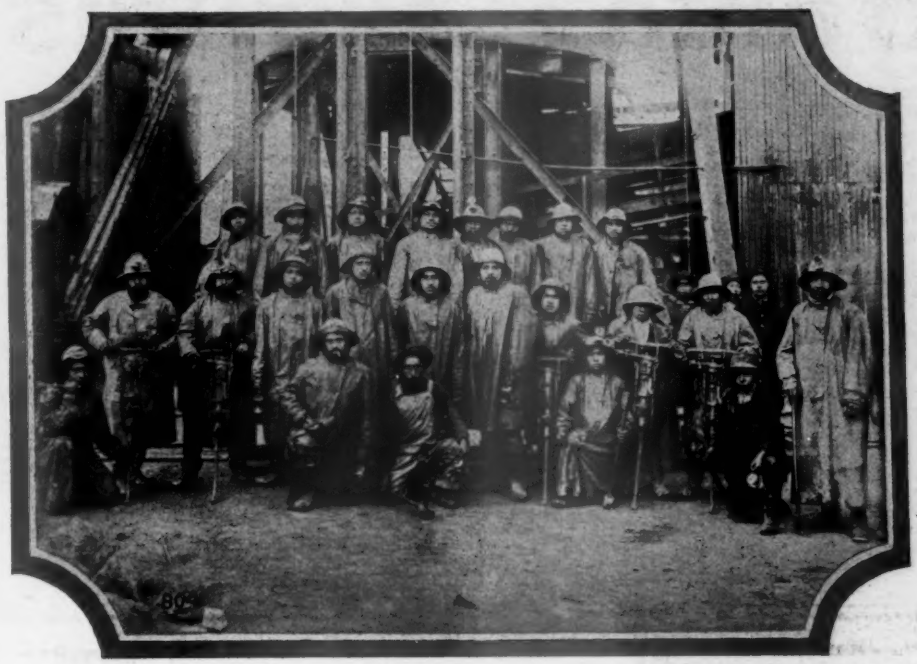

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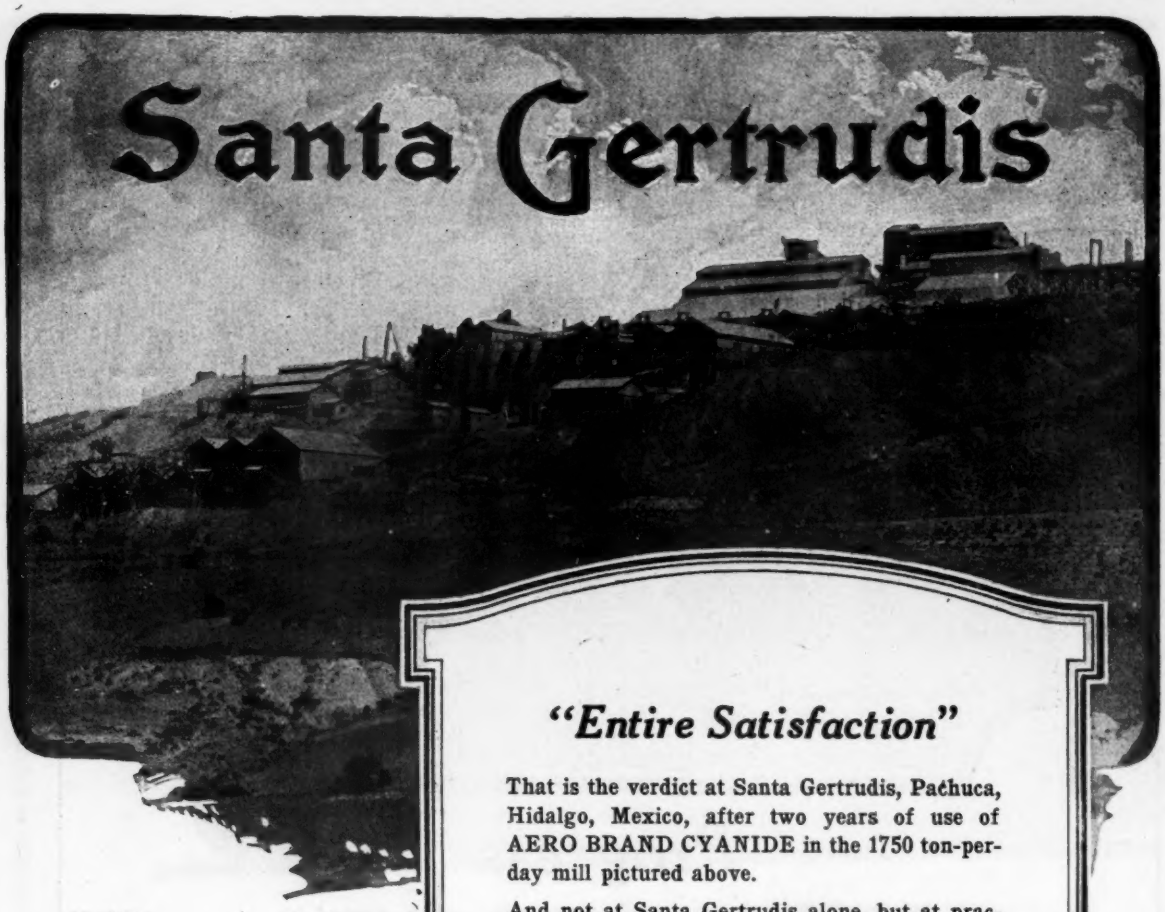

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THE MINING CONGRESS JOURNAL

AUGUST, 1923

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Published Every Month by the American Mining Congress, Washington, D. C.

JAMES F. CALLBREATH
Editor-in-Chief

McKINLEY W. KRIEGH
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HERBERT WILSON SMITH
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ERNEST H. PULLMAN
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Entered as Second Class Mail Matter January 30, 1915, at the Post Office at Washington, D. C.

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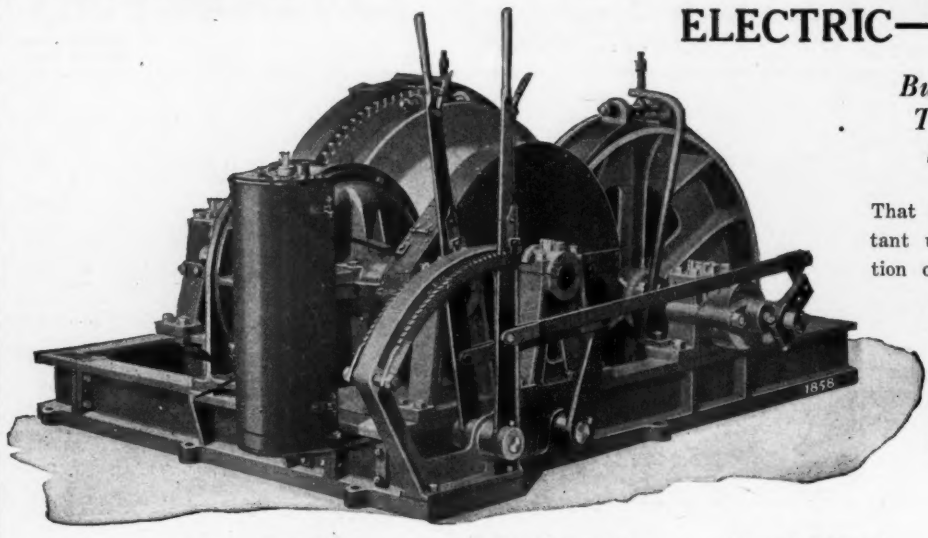

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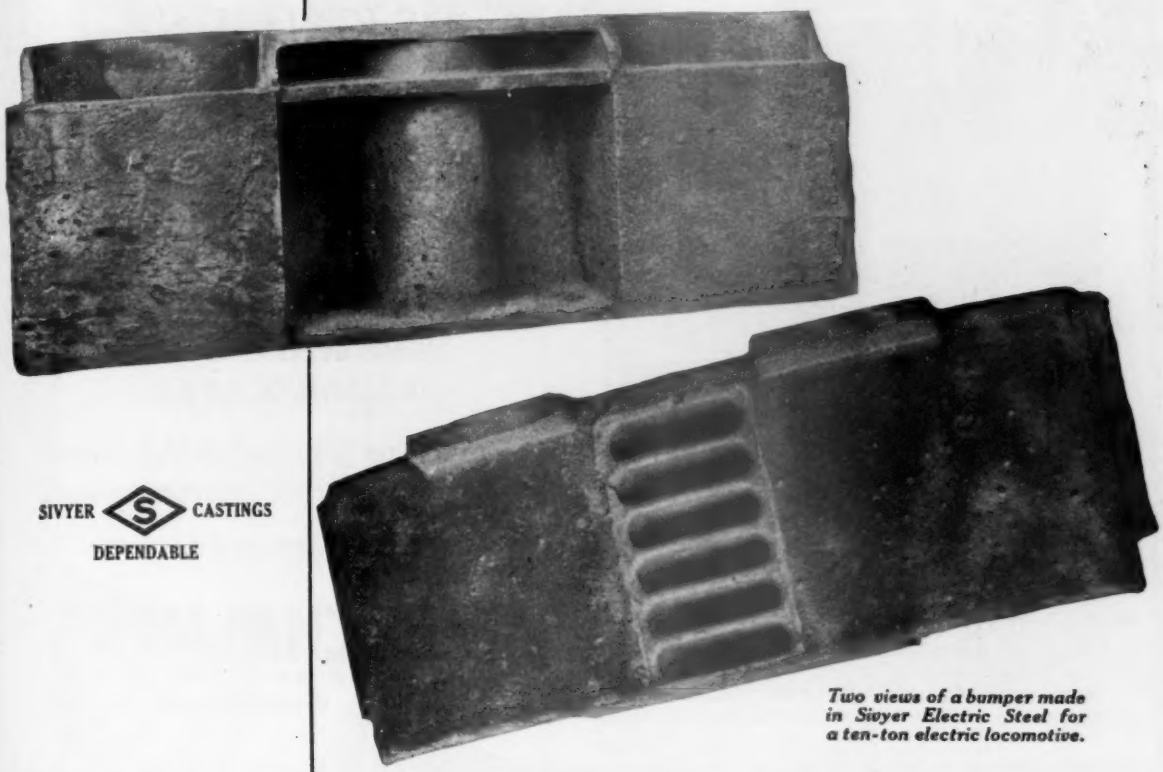

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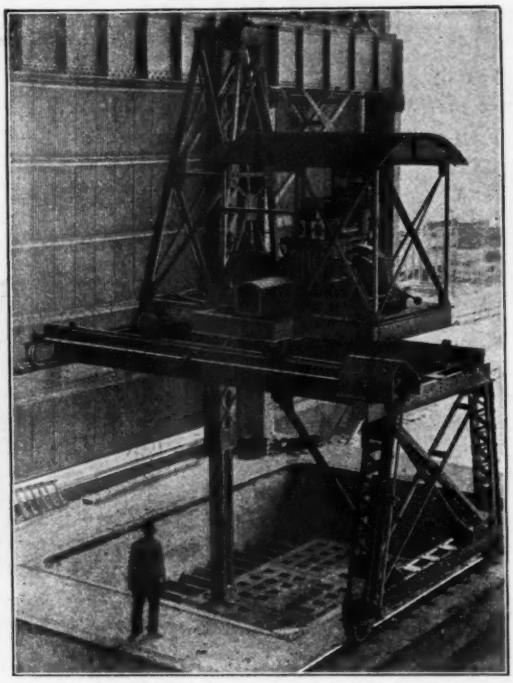

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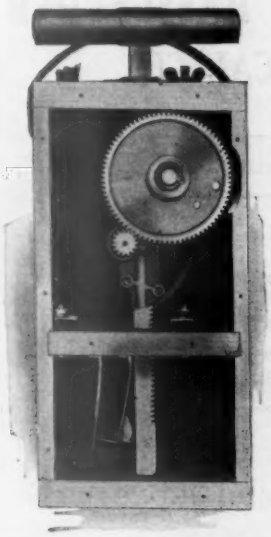

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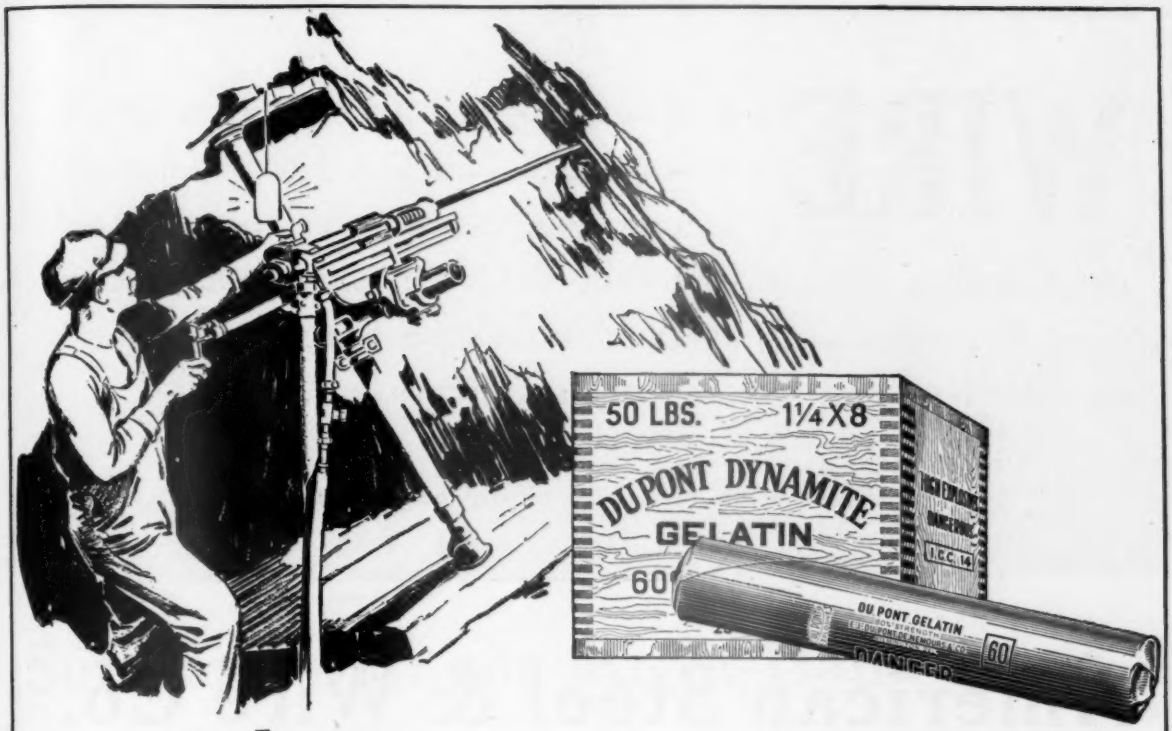

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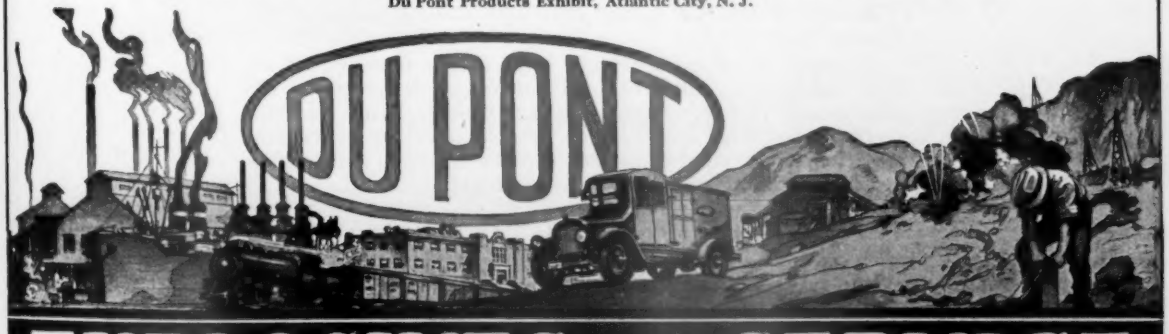

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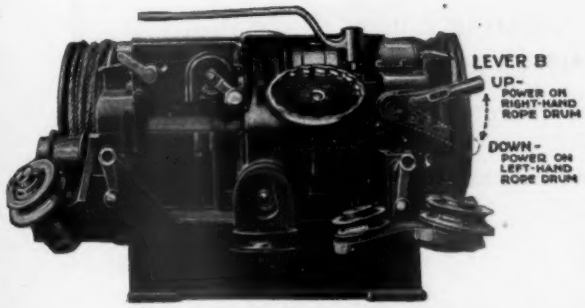

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The
MINING CONGRESS JOURNAL

PUBLISHED EACH MONTH BY THE AMERICAN MINING CONGRESS, MUNSEY BLDG., WASHINGTON, D. C.
Subscription Rate, per Year, $3.00 Single Copies, $0.30

VOLUME 9 AUGUST, 1923 NUMBER 8

THE ANTHRACITE REPORT

AT ANOTHER PLACE in this issue will be found a résumé of the United States Coal Commission's report on the anthracite coal situation. We regret greatly to find ourselves unable to approve the recommendations which accompany the report. The high character of the personnel of the commission and its unusual opportunities justified the hope that we might be in full accord with its recommendations. However, to give approval would be to repudiate the principles which have been advocated editorially in these columns for years. The comments which follow are but repetitions, in different wording, of principles which have been announced time and time again by the MINING CONGRESS JOURNAL.

In reaching its conclusions, it seems that the commission has entirely lost sight of the two great fundamental laws: First, the constitution of the United States, as old as our government, and second, the law of supply and demand, as old as civilization. There is and can be no coal problem which cannot be solved by the application of one or the other of these laws or both of them. No solution is to be considered which does not build on that solid foundation.

The coal commission was created to recommend the finishing touches on a problem already well advanced towards solution by the natural laws of trade and commerce and by the rulings of the greatest judicial organization on earth. However, it was also confronted by a distracting influence. Public sentiment had become impatient. To appease it, we tried regulation. The situation was comparable to that of a man recovering from typhoid fever. What we should have had was a few days for rest and recuperation after the disease was conquered. Instead the new experiment was to try violent physical exercise. That is, we applied government control. This government interference with the coal business was very properly adopted although very unwisely executed as a part of our war program.

The two great instrumentalities through which coal is furnished to consumers—the mines and the railroads—have suffered more than any other industries because subject to a more intense governmental interference with usual business methods of operation. The true function of government is to see that the businesses of mining and distribution of coal are unhampered by any artificial agencies. Instead, it left the natural difficulties undisturbed and imposed some of its own.

There is an anthracite problem. There is a bituminous problem. Any problem can be solved if we take pains first to understand it. The anthracite problem is not yet understood. We sincerely hope that the commission will be more successful in the analysis of the bituminous problem and that, as a result, its recommendations will be understood.

No plan will be effective that does not give proper consideration to the rights of private property. No plan will be effective that interferes with the individual incentive which gives to each the opportunity to make the most of himself. In reaching this plan, one question must be answered: "What is the coal problem, which so disturbs the public mind, and in an attempt to answer which the coal commission seems to have made its recommendations?"

Up to the beginning of the war the United States consumer had been supplied with the cheapest coal available in any country in the world. Great industrial prosperity had been based very largely upon cheap power. To be sure, there were many who, believing that anthracite coal should be sold at the same price as bituminous coal, had therefore criticized the fact and assumed that because of the restricted amount of anthracite coal in existence an advantage was given to its production. The public attitude is easily understood. The public mind is likely to accept that which it hears frequently reiterated, particularly when some phase of his own personal experience justifies such conclusions.

Only recently a very fair-minded Washingtonian said: "I have just had to pay $14.25 per ton for three tons of anthracite coal. Before the war I was able to buy it for $10.50 or less. That coal ought to be produced just as cheaply now as it was before the war."

The reply was:

"Coal cannot be produced as cheaply now as before the war because of the fact that coal mine wages and railroad wages are now largely in excess of those prevailing before the war. You, yourself are now earning more than 50 percent more salary than you did before the war. As a matter of fact, you earn more coal by a day's work now than you did before the war. Why should you complain?"

But to the man whose earnings are on the pre-war level and to the farmer whose earnings are less than they were before the war (and the farmer constitutes a very large part of the consuming public), there is a real problem to which we recommend the activities of the coal commission.

The wages of the gold miner must in the end furnish the best guide to wage levels—as his product must in the end regulate the general price level of commodities.

In the end wages in different branches of industry must necessarily maintain a proper relation to each other. The law of supply and demand will effectually solve this problem unless interfered with by artificial agencies.

I may make myself immune from that law by creating a legal requirement that no man can take my job until he has received a license from some agency which I control. If I can so fortify myself, the farm laborer, working for one-quarter of my earnings, will not be able to leave his calling and by a perfectly proper compe-

tition force me to work for such wage as will give to the consumer the product of my labor at a fair price.

No permanent advantage can be secured by these artificial regulations. When the cost of anthracite coal becomes so great and sufficiently high to justify it, science will devise a means by which other fuel is created which will either take the place of anthracite or force its price down to a competitive level.

Not long ago a very prominent coal operator, who has been investigating the by-product coke business, made the statement that within ten years anthracite coal would have sharp competition. The problem of anthracite coal will be solved in time by scientific investigation. The problem of bituminous coal, involving the conservation of our fuel supply, the conservation of capital applied to the operation of the business, the conservation of the surplus labor supply, and the cut-throat competition which will always prevail in any line of business where the productive capacity is in excess of possible consumption, is a real problem, not easy of solution.

All these problems will be promptly met when the coal commission shall devise a plan, which can be made effective, which will make possible the continuous operations of the lowest cost mines. The doctrine of the survival of the fittest will quickly apply itself; the law of supply and demand will immediately bring into operation the higher cost mine whenever the market price justifies its operation, and it will not be necessary for the government to exercise those unusual powers which forbid the construction of a railroad or the opening of a mine in violation of constitutional principles because the economic law will promptly and effectually bankrupt those who invest their money in a losing enterprise. The best guarantee of a fair price to the consumer is found in the certainty that a rising price will call into operation the next lowest coal mine.

The constitutional safeguards and economic laws which have protected its citizens in their right to unlimited rewards if earned under these limitations have made this the greatest country in the world. We cannot safely experiment with a tree which bears such fruit.

CHARGED WITH A PUBLIC INTEREST

THE United States Coal Commission has made its "separate report" on anthracite. It has recognized the good in that great industry. It has stressed the dangers which inhere in described forms of organization. The information gathered by the commission has been handed to the public in such fragmentary form that we are not able to judge fully of the merits of many statements made. However, the investigators declare that they have discovered and employed an entirely new method of measuring and reporting labor movements for great industries.

The commission is made up of men who individually and collectively command great respect. They have undertaken a task which, for years, has needed to be done. It is beyond question that these men have produced many things which will justify public confidence; the large outlay of money; and their own hard work.

But, much of the value of their work has been obscured by one unfortunate phrase which seems to have been literally dragged into the recommendations. The commission declares that "anthracite is a commodity charged with a public interest." The commission enumerates the institutions which have passed under federal regulation and declare that anthracite should be similarly treated. This reasoning and phrasing spoil the report by introducing a proposal with which public spirited men cannot agree and which they must oppose with all the vigor at their command.

The United States Supreme Court in the Kansas Industrial Court case indicated the trend of judicial thought on the proposal to classify a commodity as being charged with a public interest. It indicates that to be properly so classed an enterprise must first have clearly dedicated itself to the public service. It mentions specifically hotels and public conveyances. They have from the beginning held themselves out to serve all alike and on equal terms.

By a bargain, rather than by a dedication, gas and electric light companies have been classified as public utilities. In the conduct of their business these companies must have special privileges on the public streets. They must have the right to tear up the streets, for example, to make repairs. The municipalities in granting such privileges to these companies exacted their consent to allow their charges to pass under regulation. That was a bargain and not an admission that their business was essentially of a public-service character.

Taking into account the recent decision of the Supreme Court and the known facts about the bargains between municipalities and the gas and electric companies, it would seem that the preliminary necessary to a declaration that anything is charged with a public interest is a voluntary or compensated surrender of private rights.

That being true, it is obvious that no legislative body may, by force, so classify an industry without doing something which closely resembles confiscation. When a body of the high standing of the United States Coal Commission deliberately recommends to Congress any such course, men who have a lively respect for the constitution and its creature institutions are justified if they express their amazement.

Our feeling of uneasiness over the trend of things grows as we follow the reasoning which is employed to support the proposal. The commission declares that on this continent anthracite is produced in only one section of Pennsylvania. It says that the only other deposit worth mention is in Wales.

Thus this revolutionary doctrine seems to rest on a mere matter of geography and a suggestion that the total quantity is limited. The identical reasoning might under conceivable conditions and with equal justification, be applied to the cotton and the cane of the south; to the rapidly disappearing stumpage of white pine lumber; to sugar beets; to iron ore and to a host of other things. It does not need much of a stretch of the imagination indeed, to believe that the same rule may soon be applied to petroleum.

None of these industries have dedicated itself unreservedly to the public service. If the principle laid down by the Supreme Court, in the Kansas Industrial Court Case, shall stand, they cannot be regulated by federal action. But, if the rule of the coal commission shall apply, all of these industries can be classified as public utilities by an act of Congress which is persuaded to violate the privacy of present owners.

The principle upon which we stand firmly is that Congress cannot thus invade the anthracite industry without establishing the precedent which can be applied, with equal force, to an ever-increasing number of commodities. If this violence is done to the anthracite industry, then we have, indeed, nullified the constitution. Thereafter we may as well set out deliberately to recon-

struct our charter of human rights. The new document written in accord with this sweeping recommendation would be a new charter of governmental rights to replace the existing rights of individuals.

We hope that the United States Coal Commission, which undoubtedly wrote this report under stress, may in view of the seriousness of the situation thus created see fit to modify this recommendation materially.

PUBLICITY OF RETURNS

TREASURY OFFICIALS deny responsibility for recent press reports charging that "shrewd corporations, able to hire the best lawyers," are successfully hoodwinking the government in the adjustment of their income tax returns. These officials deny that refunds are made because revenue officials, through incompetency, inefficiency or other cause, are unable to ascertain the true tax liabilities of corporate taxpayers.

Refunds are made only when the income tax unit, after an exhaustive examination of taxpayers' books and records and a thorough investigation of all facts and circumstances surrounding taxpayers' affairs, finds that overpayments have been made. Reports that taxpayers are defrauding the government of millions of dollars through refunds or credits are false. Taxpayers are, in most instances, helpless. The millions of dollars collected as the result of additional assessments offset the refunds.

The income tax unit, with its wide discretionary powers granted under the revenue laws, is not being hoodwinked or defrauded. It collects all that the government is entitled to under the law, which is its duty, and often collects more. Thus, taxpayers are compelled to fight for their rights under the revenue laws, and refunds or credits represent amounts which have been illegally assessed and collected by the government.

Since taxpayers who make fraudulent returns are punishable at law and are subject to severe penalties; and since the government is provided with ample authority and the legal machinery with which to uncover and deal with frauds or misrepresentations, the need for publicity of returns in other cases is not apparent. The proposition appears to be a part of the general campaign that is being conducted by a powerful group of radical leaders whose sole object is to mislead the public and stir up nation-wide dissatisfaction with the government.

Treasury officials deny responsibility for this campaign for publicity of tax returns. It is conceded by all who are familiar with business affairs, that publicity of tax returns would be disastrous to business enterprises of the country. Such publicity would involve the disclosure of most intimate private matters, policies, trade secrets, financial arrangements, business relations, and other matters vitally important to the welfare of business enterprises. To reveal these matters to domestic and foreign competitors, unfriendly business interests, and scheming politicians would be most unfortunate and the public ultimately would suffer.

THE INDIVIDUAL'S TAKINGS

THE OLD PHRASE "labor and capital" used to be translated into the understandable expression "hard work and self-denial." That is, it was hard work which created the wealth; it was self-denial which accumulated it and reemployed it.

However, that is an expression and a definition taken out of the long ago. And, like most old fashioned things, it has been abandoned for something which is dressed according to the mode of the hour. The present way of saying the same old thing is somewhat different. One man says:

"We work to finance our hours of leisure. If we have tastes in leisure which are too costly, we soon have no leisure in which to indulge them."

However, the strictly modern language is far more scientific. It holds that each man can get for himself alone only a few things out of life; that those are the things that make possible, or add to, his enjoyment. Fundamentally these indulgences are limited by the amount of time which a man has to enjoy them; the amount of capacity which he has for such enjoyment; and, the relatively few ways in which a man may enjoy himself. In these interesting respects, it is deducible that the takings from life and from industry by the greatest capitalists differ but slightly, in degree or quantity, from the individual takings of the most unskilled laborers.

Thus, both men stand even in the matter of the pleasures of the table. In some respects, the chances are that the unskilled laborer will win more enjoyment from his table than can the capitalist because the laborer's digestion has not been ruined by too much previous nervous activity.

Some persons are so lost to the sense of enjoyment that they take pleasure in sleep—in being unconscious. If that be considered an attainment of happiness, it must be true that no one can get more out of life than another when both are unconscious.

Some people find enjoyment in clothes. Even so, a man can wear but one suit at a time. In this respect the capitalist and the laborer are in no sense different from each other; neither has more than one body to clothe. Also, the capitalist must wear clothes in which he feels and is comfortable; so must the laborer.

Two men, we will say, find their enjoyment in the open country. One man likes to go to a place where he admires and enjoys a single view; the other likes to get a panorama. In mingling with nature, the capitalist and the laborer are alike in what they take from life. If one sits and drinks in a view, his pocketbook does not contribute anything. Even in getting the panorama view, the only possible difference is that one may take his view from the seat of his own automobile while the other takes his from the seat of an interurban car. In this, however, the experience and the enjoyment are the same.

You may thus travel through the homely experiences of mankind only to come to the conclusion that since the physical capacity of a man to enjoy life is limited by his time and his energy and since this capacity cannot be increased by the bank deposit, the two stand shoulder to shoulder in their actual takings from life.

Since all men are thus equal, in their takings, you come in the end to the essential cause of disagreement between the two. The capitalist who works for money which he cannot use personally does so for the purpose of creating additional capital, which in turn he puts back into other enterprises which give further employment to labor. The personal—not physical—gratification, therefore, of the capitalist is not in any respect sensual. If it must be defined, it is egotistical. The capitalist loves to appear among his fellows as a man of affairs; he likes to show that he can organize and operate industry. Thus, he works day and night to pile up money and employ his great skill in creating a great corporation so that he may have larger gains with which to extend his operations in other directions.

All of this does not increase the capitalist's pleasure

of eating, sleeping, personal adornment or in the matter of recreation. Therefore, it does not increase his personal takings out of life. What it does is to increase his personal satisfaction with himself. The laborer feels that he is denied this other kind of taking from life.

"Labor" and "Capital" are, therefore, not the causes of strife. They are not at the bottom of our industrial unrest. But "egotism" is the fighting word of civilization. It lies at the root of all our discords.

AN OBJECT LESSON

THE DIFFICULTIES between Germany on one side and France and Belgium on the other are proving an object lesson in governmental methods of procedure. To get full benefit of this situation it is necessary to restate the events in logical order.

At a time in the past, the German and French governments disagreed and went to war. The German army invaded the French territory and visited destruction upon French buildings and lands from which the French government had reason to expect in future a continuing revenue. The war therefore was a temporary incident, but the damage was continuing. The latter created a claim which France has held against Germany.

In phrasing his claim Premier Clemenceau of France waived the harsher terms of "damages" and "punitive damages" and employed the softer term of "reparations." This implies, merely, that the German government shall make good what it destroyed. This introduced the difficult and ticklish question of an exact accounting to determine the extent of the damages. When these were found to be enormous, there entered a question of policy, namely, the time which should be allowed the debtor to pay.

There has been, as we understand it, no dispute as to the existence of the claim itself. However, there has been a considerable dispute as to the amount of the damages. Thus the dispute is solely as to the accuracy of the accounting. Also, many questions have arisen as to the time during which the debtor may liquidate the damages.

There arose a great difference of opinion as to what should be the future attitude toward the German Republic. This difference primarily was between France and Belgium on one side and Germany on the other; it soon developed a disagreement between France and Belgium on one side and Great Britain on the other.

Being wholly out of patience with the German disposition to evade the real issue, the French and Belgian governments decided to make a demonstration of force. Thereupon they occupied the Ruhr valley and proceeded to extend their forces day by day and week by week into an ever increasing zone.

In justification of this policy the French government declared that what it was doing was precisely what the former German Empire under Bismarck had done following the war of 1870. Therefore, it was contended, the French government was but paying a return visit to Germany. However, it develops that the times have changed and with them the mood of the people. This introduces a factor of fundamental importance. That is, fifty years ago the French people were willing to admit the obligation and to pay. So the French people set to work diligently and patiently to pay off the debt to Germany. The presence of the German soldiers was not sufficiently irritating to blind the French to the obligation to pay the debt.

It seems that today and to an extent the theory that "to the victor belongs the spoils" has been abandoned. At any rate, the Germans are not so willing to pay, especially under duress. Thus, they have resisted the French encroachments and have stigmatized them as a fresh act of war.

The significance of the incident lies in these things. The acts of the German government of fifty years ago and of the French government today are identical. But the mood of the French people of fifty years ago and of the German people of today are exactly opposite. Because of the impasse, created by the mood of the German people, it became evident that European business was being interfered with;the economic machine was jammed.

When that interesting and dangerous situation developed, the government of Great Britain, through its Premier, Mr. Stanley Baldwin, suggested a new point of view. In substance, it is that the acts of the German government in past are one thing; the importance of the present German government and the present German people to the economic situation to the world is an entirely different thing. Thus, in the eyes of Great Britain, we have two jobs to do—one is to clear up the wreckage of the past political disagreement; the other is to put civilization as it now stands, on a sound economic basis. Mr. Baldwin, in substance, insists that the payment of past political debt cannot be allowed to cripple the existing economic machine.

It is in the latter particular that the situation is most interesting as an object lesson to the American Republic. We, in this country, have too jobs to do. One of them is to clear up the wreckage which resulted from the war. The other is to put the economic machine in order to function today. It may be necessary to punish some of our business people for certain things which they did in the war while we were all swayed by the looseness commonly practiced in times of war. If we follow the suggestion of Mr. Stanley Baldwin, which seems to be peculiarly sound, we will so administer the punishment for past offenses that it will not interfere with the present efficiency of the economic machine.

In his peculiarly broad-minded survey of the present situation Mr. Baldwin takes into account the interdependence of economic units, not only within a single country but as among all of the countries. With respect to Europe, his view is that Germany is as much a part of the economic machine as are France, Belgium and Great Britain. He believes that all of these must work together for the restoration of economic sanity in Europe or the world cannot go ahead on a sound peace basis.

The parallel to that condition which is found in the United States is that we have certain industries in America which may have offended public morality after the war or during the war. But, they are still a part of the whole economic machine which must serve this country today—now. We cannot afford to punish, so severely, those offending industries for their past offenses that we will cripple their ability to serve us in the present critical situation.

Then, too, this other situation enters. President Harding in his St. Louis address, said that it is not possible, as yet, to measure international competition. We, in this country, must of course participate in international competition. In order to do so, we must have every unit of our machine so equipped and functioning that we can hope to compete.

If we are too particular to correct the practices of our own industries with respect to their past performances or even with respect to our present ideas of morality, we may achieve the main objective, but we can

easily destroy the effectiveness of the machine with respect to meeting foreign competition.

The coal industry affords a case in point. In the eyes of some of our people, the coal industry offended in the matter of morality during and immediately following the war—regardless of the fact that its conduct was in those periods under regulation by the government. In the opinion of some of our people, the coal industry must be punished for those past offenses and must be so broken that it will not offend similarly in future. However, before the American Republic invades the coal industry, it must stop to inquire whether the people in the coal industry will consider that invasion to be an act of war and resent it. Then, we will have to consider whether a possible impasse between the government and the coal industry will delay the reconstruction of the whole of our present economic machine.

If we find that the coal people will submit amiably to aggression and that regulation will not delay the reconstruction of our economic machine, we have still to consider the possible effect of this regulation upon our international trade. It is an axiom as old as modern industrial history that the foreign commerce of a country rests mainly upon its offerings of coal. That is the foundation upon which the British and the German foreign commerce rested. We are planning to build our foreign trade on coal. While, therefore, we are discussing the moral aspects of coal regulation we have to consider the effect of that morality upon our possible success in foreign markets.

DOING THE GOVERNMENT'S JOB

WHEN THE PRESIDENT was half-way across the continent a conspicuous western business man and politician—ably assisted by an outstanding journalist—informed the public that it wasn't always wise for a public man to talk too much; he might easily expose his ignorance while trying only to state his views. The danger which he saw was the destruction of the pedestals upon which stand popular idols.

It happens, however, that the application was unfortunate because the subject under discussion was one which the President ought to know about—doing properly the job of running the government.

In his speeches Mr. Harding was particular to say that he occupies two jobs—as the chief executive of a nation and as the leader of one party. In these speeches he appeared as the executive. In that position, only, are we interested in him or in what he has to say. When he discusses his job—that of running a great government—we are decidedly interested in his point of view.

In his first speech at St. Louis, he acknowledged that as the head of this government he is conducting the biggest business organization in the world. He is at the head of an institution which collects and spends annually more money than any business organization. By going into detail he might have produced one enlightening example—the United States Shipping Board and Emergency Fleet Corporation. Admittedly this is larger than the United States Steel Corporation and the Pennsylvania Railroad combined. Still, it is only one cog in our great government machine.

As the net outcome of last year's administration he announced that whereas a deficit of $800,000,000 had been expected—about 20 percent—there had been a surplus of $200,000,000—about 5 percent.

The President then announced as his policy "to strike at the cost of doing the business of the government" to the end that the tax burden upon the American people might be reduced.

As one part of the job of any administration is to conduct our foreign relations, he proposed the world court. Thus he proposed to project into the international situation one part of our American idea of government, namely, to carry disputed questions to a court. He neglected to say from whence were to spring the laws which are to be applied and interpreted by the court but probably considered that the treaties make up a sufficient body of laws and that the moral and physical force of national armies constitute a sufficient constabulary.

In his discussion of economic questions the President said that we have done a tremendous job of reconstruction without indulging in the dangerous experimentation which has been common in other countries.

Of course, the President's description of methods by which these results have been accomplished was rather limited. However, the procedure which seems to have been followed can be described by saying that the plan was to put into the hands of the people the tools with which they might work out their own problem.

The President, in a later speech, declared that the Government must see to it that the people have the facilities with which to carry out their purpose. One gathers from this that if the people want to take voluntarily to the water or to the public highways or to the railroads to move their goods, the government must see that those waterways and highways are free and those who manage the railways are permitted to keep them in condition to be used.

With respect to the marketing of commodities, such as the products of the farm, his view was the same. That is, if the people wanted to market their goods in cooperation with one another it was the obligation of government to strike down any obstacles which might hinder them in the free exercise of their choice.

It is always difficult to extract a policy from an address which is not designed to disclose policy. But, if we interpret, properly, the President's views, they show a tendency to return to constitutional endowments while conducting the government which rests on that constitution.

The District of Columbia had the same financial experience as the national government in that its receipts, for one year, were larger, by more than a million dollars, than its expenditures. It therefore had a surplus. When this fact became known, one of the commissioners made public an elaborate argument against lifting part of the tax load from the people and proposing larger appropriations that the surplus money might be spent. That breathes the thought of our governing classes—if you collect more money than you have spent, find new ways to spend it. The same theory has dominated many communities in mining districts.

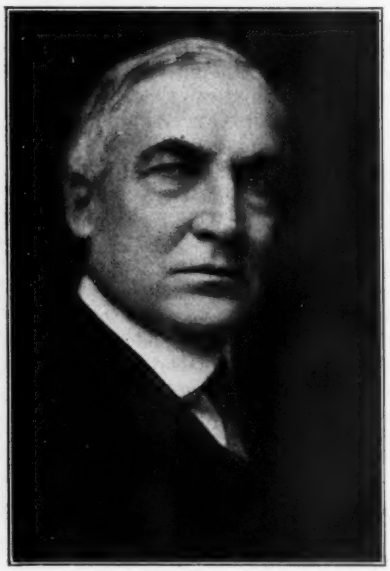
When, by contrast with what exists, we find the President studying the real job of government, explaining its functions, and announcing a broad point of view upon these questions, we cannot subscribe to the criticism that he was either talking too much or, even by implication, that he was exposing his ignorance. On the contrary, the President disclosed to the people the broadest and soundest fundamentals when he said it was the business of government to look, first, to its own cost; to relieve, insofar as possible, the tax burden upon the people, and to provide the facilities by which the people can solve their own problems.

A MONTH'S NEWS BROUGHT UNDER REVIEW

The President Explains Governmental Policies on World Relations and Labor—Senator Oddie Moves for a Silver Export Association—The Commerce Commission Stirs the Moot Coal Question

THE month has brought an uncommonly complete exposition of policy by various agencies of government. These expressions are from so many departments and independent establishents that it is out of reason to believe that they have sprung from a common point of inspiration. Besides, it is known that no personal center of inspiration—such as has existed under some past administrations—exists. And yet a common thought seems to pervade them. This leads to the inquiry whether extended discussion is crystalizing public opinion into a national policy.

Obviously, the outstanding event of the month was the trip of the President across the continent and the series of



The President

speeches he delivered to explain his position on many questions. With characteristic frankness, he admitted that he has wished before to visit with the people, but has been held in Washington by the fact that Congress has been in almost continuous session. With equal candor, he announced that while he is a partisan in politics, he was trying to express only the opinions of the Executive.

The World Court

In St. Louis, the President faced an audience which three years ago had taken such a stand against the League of Nations that it had given a Republican majority in a Democratic state and which, a year ago, had reelected Senator Reed when he had violently opposed the world policy of Mr. Wilson. Also, Mr. Harding was heading into the West, the home of outstanding "irreconcilables" on the question of any definite "foreign entanglements." And, behind him, in the East, was a division of public men over the possibilities if the World Court should be established. The President had to take all of these things into account not for the purpose of bolstering up his own political position but if he wanted to get a plan which would give the nation the benefit of a World Court without arousing all of the old partisanship on the familiar issues.

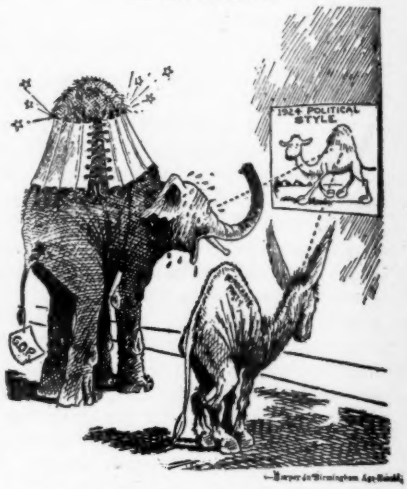
SAY FELLERS, YER MA'S CALLIN'!

—Copyright by The Chicago Tribune.

The President was clearly impressed by the need to find some way of dissolving international disputes without taking an appeal primarily to the force of arms. He had to recognize that the instant our people or their goods are beyond the three-mile limit they enter the zone where no police exists and where relationships rest on treaties enforced, if need be, by the bayonet and the capital ship. He was trying to devise some agency to which appeal might be made in hope of a peaceful solution of the inevitable disputes. His conception was the World Court.

In his attempt to get a World Court which would be free of the League of Nations—which he openly abandoned—he had to suggest a new method by which the members of the court might be appointed and by which the expense money might be raised. Ordinarily these things imply a legislative body somewhere in the background. To obviate the need for such a body, the President proposed that the court fill its own vacancies and that the nations which subscribed to the court should create a joint commission to pay the necessary expenses. The American system of checks and balances was thus introduced in part, in that if the nations should not approve the court's selection of its own members, they could exercise a practical veto by withholding the expense money.

MARTYRS TO FASHION



NAGGING

LOOK OUT FOR THAT BUMP! — TURN TO THE LEFT! — WATCH THE CROSSROAD - DONT CROSS! — DONT DRIVE ON THE RIGHT SIDE - GET YOUR FOOT OFF THE GAS! -ETC.-
G.O.P. NATIONAL COMMITTEE
AFFAIRS OF STATE

—Louisville Courier-Journal.

The President admits freely that this suggestion will require a revision of the ideas of the other governments with respect to the court. He admits that the whole scheme will have to be recast with the American idea as a base. This will take time. His idea, apparently, is that thoroughness and soundness is more im-

portant than haste. He is willing to allow his idea to ride for a while. To that extent, the criticism, which is common, is justified in declaring that the St. Louis speech killed the court as an immediate development.

The Labor Policy

The speech which the President made at Helena, Mont., was the one which has occasioned most discussion. He has been assailed because of it, on the score that he was thus expressing the views of a politician rather than those of a statesman. The criticism has been that he was catering to the labor vote. The more this statement is discussed, however, the more the public realizes that the President was but stating with clarity and precision the situation as it exits. To an extent, therefore, he was but exposing to the people the labor problem by which they are confronted.

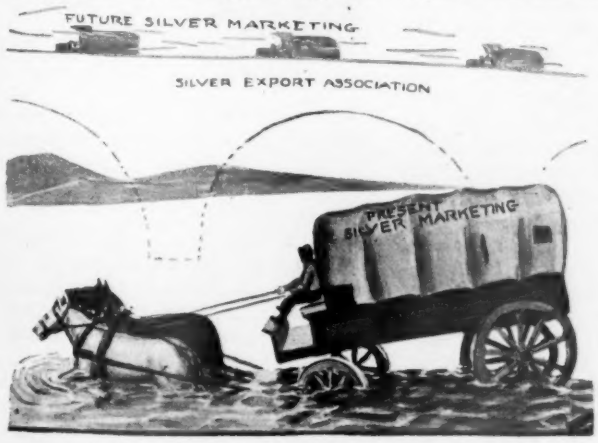
A careful reading of that speech will disclose the fact that it admits that labor has one view, capital has another. Each group is struggling to impose its views upon the other. Each has created an organization or organizations to further its own ideas. It is admitted that both of these organizations have, as a result of years of development, grown to such size that a clash between them is serious not only to themselves but to the people as a whole and to the state.

Two methods of procedure have been suggested as a means of composing these differences. One is to break down the strength of the unions. The other is to introduce the government as an arbitrator in the inevitable disputes. The inference has been that the government would throw its great weight into one side of the scale to influence all decisions in the direction which best served its immediate purpose.

The sum total of the President's speech is that he announces that the government is not going to take either of these positions. He says that he is not going to deny the right to organize because such a decision would carry too far into the orderly practices of the people—even to the point of breaking up helpful trade associations and even of crippling political parties.

Then the President said that the Administration was not intending to take the side of capital in saying that the labor unions ought to be destroyed or the side of labor in saying that important industries ought to be nationalized.

In brief, the President recognized—speaking for the whole government—the right to organize and the right to carry on propaganda to "put over" economic ideas. He said the government was going to preserve these institutions without taking, itself, any part in them. This speech was, in reality, full notification to the people that having created a problem, they must solve it themselves while the government did its job of enforcing the laws and keeping the channels of commerce free and obstructed.



Fords are out of date in these days of bridges

Cooperative Action

While the President's address on agriculture at Hutchinson, Kans., has attracted wide attention, not so much importance attaches to it as to the others because, in that instance, he spoke openly as a partisan and not with particular reference to governmental policies which ought to underlie any administration. The nearest approach to the latter was in his reference to cooperative marketing. This subject ties in with the right to organize as previously discussed and has some importance in connection with the growing criticism of the Sherman Anti-Trust Law.

The admissions by the press are that the markets are so big and the productive capacity of each unit is so small that, clearly, it is uneconomical for each producer to seek a market for his own products.

It is admitted also that if the cooperative idea shall be allowed to extend too far it may creep over into the zone of restraint of trade inveighed against by the Sherman Act.

The struggle has been, and is, to find a definition of cooperative action which will encourage the permitted without inviting the prohibited kind of action. It is realized that this cannot be done by

A SILVER POLICY FOR THE AMERICAS

Senator Oddie

Representatives of silver producers of the United States, Canada, Mexico, Central and South America are invited to meet with the Commission of Gold and Silver Inquiry, of the United States Senate, at Reno, Nev., September 4, 1923. The call for the meeting has been issued by the Hon Tasker L. Oddie, the chairman of the commission.

The meeting is one of the greatest importance to every producer of silver. It should accordingly have the largest possible attendance. The program and purpose should command instantly the earnest attention of every man interested in the production of silver.

Senator Oddie announces that the commission believes it impracticable to consider bimetallism or the free coinage of silver at these meetings. Therefore any matter relating to either subject will be excluded.

He announces that, in the opinion of many experts, much practical good could come from the formation of an association to work under the Webb-Pomerene law which encourages cooperative action and unit selling when dealing with export questions. He asks for a full discussion of this proposal and if possible that the discussion shall result in some action looking to the organization of such an association.

The meeting thus looks not only toward a common silver policy for all of the Americas; it has in mind a cooperative action of all for the improvement of the condition of all. The situation of the silver industry is such as to require some immediate relief. The plan which Senator Oddie, with his vast experience at home and in Washington, suggests is one which commands most careful attention.

expressing the permitted action in terms of dollars or of quantities because a gradual expansion of our volume of business would soon make the definition obsolete. Other measurements and definitions are quickly abandoned because of similar defects. Facing the difficulties, the President did not try to draft a concrete recommendation but contented himself with approving the principle—if satisfactory details can be worked out.

Reform of Tax Methods

In various speeches the President spoke about the need to lessen the tax burden. Not the least of these was imposed by the old system of review of assessments which required that an applicant come to Washington—usually with his attorneys—to present his case. Not infrequently, the visitor was unfamiliar with the Revenue Bureau's methods and had to spend several days in an effort to locate the person with authority to pass upon his particular case. This was so expensive that it modified gravely any refunds made, ultimately, to the applicant.

This matter is in progress of adjustment, as is indicated by the important and pending announcements of the Revenue Bureau. The central ideas—which will be welcomed by men in industry—are the decentralization of audits and adjustment of disputes by field representatives in the cities where the applicant resides. The concept, in this reform, is that it is easier and cheaper for a few agents of government to travel to

ANOTHER CATERPILLAR PLAGUE

the home of many taxpayers than it is for the many taxpayers and their attorneys to travel to the seat of government.

The American Mining Congress has been an open advocate of this reform for more than two years and is gratified to announce that the new policy of the tax unit recognizes the soundness of its position.

Three Commerce Decisions

Three decisions handed down within the month by the Interstate Commerce Commission are of extreme importance. It happens that all of them were directed

Hon. Clyde Aitchison

at phases of the coal question. However, it is impossible to see them in any other light than as important pronouncements having to do with the policy of government. It is contended, of course, that these are commission decisions and therefore have little or nothing to do with any particular administration. That, obviously, is true. At the same time, the approved governmental method is to create commissions and to allow them to exercise their discretion. To that extent, these opinions of the Commerce Commission are unfoldings of governmental policy.

The Right to Expand

In the first of these decisions the Virginian Railway appeared as a petitioner for a certificate of public necessity and convenience under which it proposed to put down the rails on a mile and a quarter of roadbed already graded and which was part of a proposed extension of some forty-two miles. The first section was to connect with proposed mines of the Pocahontas Fuel Company west of Elmore, W. Va. The facts, as they have developed since the decision, appear to be that the Virginian Railway has contracted for the electrification of its line from Mullens, W. Va., to Roanoke, Va., at a cost of $15,000,000 and has contracted for new cars, etc., to cost about $5,000,000 more or a total of $20,000,000. Its present coal traffic of slightly less than 8,000,000 tons per annum is not sufficient to support this larger outlay. It is seeking to increase its traffic to a possible total of 15,000,000 in reasonably short time.

The Pocahontas Fuel Company as it develops, has a lease on 3,500 acres of coal land upon which it is paying minimum royalty charges. It desires to produce coal to offset the outlay.

The Commerce Commission in deciding the case against the railroad declared that the Virginian has not been able for a period of months to supply all of the cars demanded by existing shippers and that there are too many coal mines in the nation. On these two accounts the certificate was denied. The present understanding is that the railway will appeal for a rehearing and, if denied it, will appeal to the Federal courts.

Short Haul Rates

The second case of importance grew out of the request of the coal shippers of southern Ohio for a reduction in their freight rates. The question thus raised was a controverted one between two or more groups of shippers. The decision would have been unimportant if it had addressed itself solely to this natural dispute.

However, the decision, as interpreted by members of the commission, raises a question of fundamental importance. It seems, from the evidence in the case, that three groups of coal producers seek a market in northern Ohio and Indiana, Michigan, etc. The southern Ohio field is closest to those markets; the Inner Crescent group of mines is next and the Outer Crescent field is furthest away. The Commission reduced the rates of the

THE SKEPTIC
The Evening Star, Washington, D. C.

southern Ohio mines; left as they were the rates of the Inner Crescent group; and, increased the rates applying to the outer group.

In explaining, in a concurring report, the readjustment, one member of the commission admitted that, in his opinion, the railways are unable to supply all of the transportation needed by the country. He declares that, therefore, the duty of the government is to so restrict business that the railroads can carry the commerce. He expressed the belief that if the railroads have more short hauls

Simplicity and dignity—integrity and courage—characteristics of our Nation, embodied in the tributes of the people to their Leaders—Washington, Alexander Hamilton, General Sherman. The view from the steps of the U. S. Treasury.

and fewer long hauls the carrying capacity of the railways will be increased perceptibly. To that end, the commission appears to have reduced the rates on the shorter hauls and to have increased them on the longer hauls.

The discussion has developed the contention that the whole of the West Virginia field is thus put under a freight rate handicap in reaching its northern markets. The discussion points out that the three southern roads—the Baltimore & Ohio, the Norfolk & Western and the Chesapeake & Ohio—have, in past, expended hundreds of millions of dollars to extend their tracks into the coal fields

PRESIDENT HARDING'S IDEAL PICTURE
The Evening Star, Washington, D. C.

and have built their rate structures to encourage the operators to give them tonnage. It is claimed now that this whole system of investments is placed in jeopardy by the new trend of the commission's decisions.

The discussion has concerned itself equally with the labor situation in the two fields. One mining district is under agreement with the union. The other two districts are, in the main, non-union. The lower rates are now charged to the union field; the righer rates are charged to the non-union field. The discussion tends to criticize the commission on the

score that it is helping the union and crippling the non-union fields—not purposely but none the less surely.

Assigned Car Case

The third decision of the Commerce Commission had to do with the ownership of cars by shippers. Some railroads which have no coal mines along them, some steel mills and some public utilities have bought coal cars which they sent into the coal fields for fuel. The contention was that having supplied their own cars, this equipment should not be included in any pool which was created by the Commerce Commission's order that all cars should be distributed among mines on the basis of rated capacity.

The commission made two important decisions in this case. It declared that assigned cars might be restricted to the mines to which assigned and could not be used for loading to persons other than the owners. However, the mines getting them might not load relatively more cars of coal per day than can the mines in the same district served strictly by commercial cars.

The second decision was to the effect that the right to assign cars, without counting them against the distributive share of the district, was reserved to the Interstate Commerce Commission acting under its extraordinary powers in cases of emergency. This has been taken to imply that the Commerce Commission expects to use rather freely in future its emergency powers. The discussion tends to indicate that this introduces even a larger measure of control over coal by the Commission than has heretofore been considered advisable.

One member of the Commission, in his dissenting opinion, says that the majority is in error, on policy, in this ruling. He holds to the view that it is impractical to expect the railroads, on whose lines the coal originates, to supply all of the cars needed to carry the nation's coal. He believes that the ruling against the assigned car practices tends to discourage other railroads and other shippers from purchasing equipment which will augment the general supply. He, therefore, favors a rule which will give to the owners of cars certain privileges with respect to their use and to that end to encourage the purchase of such cars. His own avowal was that if the railroads should flood the mining districts with equipment, the problems of the coal industry—principally fluctuations of prices and overdevelopment—would disappear quickly.

The coal operators have been presented by a new problem also and they are now attempting to formulate a policy. They had contended against the assigned car practice as tending to favor the mines which got the assigned cars and as tending to cripple the other mines. They had looked upon the assigned cars therefore as an unwholesome price influence. They had held that it would tend to establish a two priced market—a low priced market among those who got assigned cars and a higher priced market among those who had to take their chances after the first run of cars had gone to the favored mines. Having won their technical point, however, they find themselves facing the Commission's proposal to undertake, itself, the assignment of cars in cases of emergency. This, as they view it, introduces the threat of permanent interferences with distribution.

A DIALOGUE

Dr. Hubert Work

The time—shortly after the administrative party had passed through Colorado. The scene—a breakfast table in a Leadville, Colo., restaurant. The personnel—a prominent Colorado lawyer and the Secretary of the American Mining Congress.

The attorney was Mr. John A. Ewing, familiarly known as "Judge" Ewing. The title was bestowed by friends because of a certain judicial temperament, a pronounced legal ability and a broad conception of public duty. He systematically disavows it, but it sticks in spite of his protests. When discussing the recent visit of the Secretary of the Interior, Dr. Hubert Work, he said:

"One of my clients urged me to present to Dr. Work a matter of personal interest. I said to him that I have known Dr. Work intimately for more than twenty years. My high conception of his character, based on that long acquaintance, made it impossible for me to think even of suggesting to him that he should make things easy for my client or in any way be influenced by personal considerations in the performance of his public duties and his responsibility as Secretary of the Interior."

"And, if you had yielded to these requests," remarked the Secretary, "you would have lost a friend?"

"Yes, I would have lost a friend."

This is a tremendous conception of the character of Dr. Hubert Work. Still, it is universal among his intimate friends in the west.

THE ESSENCE OF THE ANTHRACITE WAGE DISPUTE

At the anthracite wage conference at Atlantic City, which adjourned July 27, the developments were:

1. The anthracite operators offered to renew the old contract and to arbitrate any and all disputed questions. The anthracite miners refused to consider arbitration as a means of settling any dispute now or hereafter.

2. The miners moved to establish the check-off. The anthracite operators voted against it. Thereupon the miners moved that the conference adjourn sine die.

3. President Lewis, spokesman for the miners, declared it to be the inalienable right of the Mine Workers to determine who shall and who shall not work in the mines.

When the full significance of these developments is understood it is realized that, at last, the ambitions of the union have been expressed. In negotiations extending over twenty years in the anthracite field and over nearly thirty years in bituminous, the Mine Workers have indicated an objective. Never before have they expressed it. To understand, even now, what is proposed, these events must be translated into simple words easily understood.

The essence of the demand is that the operators establish the check-off in the anthracite industry. This means that in future the operators shall deduct from the pay envelope of each miner the regular dues and all assessments levied by the union. What this really means is that no man may work in any anthracite mine unless and until he first consents to allow these deductions to be made. It means that no operator may employ any man unless and until he consents to allow these deductions.

This proposal sinks into the very vitals of American life and institutions. It seeks to set up a whole new order of things. That is, if the union may of its own motion and for its own use deduct one dollar from a member's pay, it may deduct five. If it may assess a miner five dollars to defray the expenses of a campaign, it may assess him ten. If the union may thus, and without his consent, take part of a miner's wages, it can take them all. And if the miner may not object to this arrangement without losing his right to work in any anthracite mine—or in any other where the union dominates—and if the operator cannot shield him, the union has made slaves of its own members.

If the union may thus say who may and who may not be employed in the anthracite mines and if it may dictate wages and conditions, the right of private contract as between operator and miner has been abrogated. That nullifies that provision of the Constitution of the United States which says that the right of private contract shall not be abridged.

If the miners' union may dictate as to terms of employment, persons to be employed, and the disposition to be made of the earnings of men, then the union has taken over the industry with respect to its investment, management and man power. Before assuming so much, the union had, in a formal memorial, admitted to the Coal Commission that the anthracite coal in the ground is worth, at least, $400,000,000. Statisticians declare that the plants and development are worth at least an additional $350,000,000. Thus, the industry is worth at least $750,000,000. When the union can set the owners and managers of that investment aside, the whole right of private property in America has been nullified.

The Coal Commission has said—its doctrine has been challenged, however—that because anthracite is essential to the people of at least nine states and because there is no other available supply of it, it is charged with a public interest—that the people have a stake in it. If the miners' union may thus take over the property, its management, and its man power for its own exclusive use and enjoyment, the so-called public interest is obliterated; the rights of the people have been annihilated.

It will be remembered that at its last international convention the radical element in the miners' union forced through a declaration favoring the nationalization of the coal mines. It will be remembered that, subsequently, the spokesmen for John L. Lewis announced publicly that they did not favor nationalization. Now the union demands the check-off. A fair definition of that device reveals that it involves a transfer of the management from its present owners to the hands of the miners' union. The permitted deduction is that the union proposes to become the depository of the industry, rather than the federal government.

Peculiar significance attaches to the fact that the operators are, by the check-off, set up as the fiscal agents of the union. They are, by force, compelled to collect the funds which finance this machine in its attempts to master anthracite; to hold its control over portions of bituminous; and to extend its power over fields not yet controlled. The operators, by force, are thus made responsible for collecting the funds which financed the Herrin massacre, the West Virginia civil war and which may pay the cost of a host of outrageous actions yet to be taken.

Smaller—but still important—legal questions are also involved. In a sense, the check-off is an assignment of wages. That device was employed, some years ago, by the loan sharks who sought thereby to take advantage of the distress of working people. When this matter was brought to public notice, the legislature of Pennsylvania enacted a law making it illegal to assign wages. The check-off, therefore—although practiced in the bituminous fields and now demanded in the anthracite field—is illegal in Pennsylvania.

However, all such legal questions sink into insignificance beside the big issues: Shall the miners be enslaved by their union; shall the manager of property be deposed and owners dispossessed; and shall the public's right to consideration be ignored while the union takes possession of this property for its own exclusive use and enjoyment.

The principles are so big as to obscure the minor questions of the right to organize and to enjoy the benefits of collective bargaining. The principles are so far-reaching we cannot accept them; the operators cannot evade them; and, in our opinion, the officers of the federal government cannot ignore them. The issue is clearly drawn. It will have to be met as it stands.

And, as we meet it in coal, we must face the solemn realization that the outcome of this great struggle in coal today will influence every man in his own business tomorrow.

A SUMMARY OF THE ANTHRACITE REPORT

Excerpts from the Findings of the United States Coal Commission Show That Production Has Increased Surprisingly; Working Time of Miners Improved; Wages Increased; and Prices Stabilized—The Recommendations

THE "separate report on anthracite" of the United States Coal Commission to the President and the Congress was submitted on July 9, 1923. That document is a summary of voluminous reports in the hands of investigators which, in turn, were reduced to summaries by numerous departments. The report, therefore, is a summary of summaries. The full data will never be made public. The departmental summaries are, however, being prepared for publication as quickly as possible. One of them, the report on miners' earnings, has already been made public. Another, the report on costs, has been completed, turned in to the commission, and soon will be published. A third, the report on mine labor turnover, will be completed shortly. The other reports will come along as soon as practicable.

The commission's report, as made public, contains all the data essential to a decision on the question. It is rather too voluminous for reproduction in full, and is here further condensed into a third summary for the information of those who may have neither time nor inclination to go elaborately into the subject. For the convenience of readers, the report is sub-divided into topics and the pertinent points of the commission's reports are quoted.

Production.—"The Roosevelt Commission (1903) assumed that anthracite production would reach its maximum limit at sixty to seventy-five million long or gross tons, whereas the actual output in 1917 and the six months of 1923 indicate that whatever may be the potential market capacity, the present mine and washery capacity is at least 90,000,000 gross tons a year. More significant is the progress made in 20 years in lessening the wide gap between mine capacity and actual output; with approximately the same number of mine workers, the production was 50 percent greater in 1920 than in 1900. To that extent, the anthracite industry was once overdeveloped and overmanned much as is now the bituminous coal industry."

Methods of Control.—"Eight producing companies, affiliated to some extent with the railroads, produce 74 percent of the total output and control 90 percent of the underground reserves. The remaining 26 percent of the output is contributed by the so-called independent companies, but the largest of these companies retains a community of interest with one of the railroads and nine others control 13 percent of the output. * * * Through these affiliations of railroads and mining companies the same financial interest controlled both the production and the transportation of coal and commonly also its wholesale distribution either through the selling department of the mining company or through a separately incorporated but financially related selling company * * *.

"The independents have been losing ground in the proportion of the total output produced, through absorption by the larger companies and through gradual exhaustion of their lands. In 1895 the independents produced 45 percent of the tonnage; in 1900, 38 percent; in 1905, 25 percent; in 1921, even after the dissolution of the Temple Iron Company, 24 percent; and, indeed, if the Susquehanna Collieries Company be included with the railroad group, the proportion contributed by the independents in 1921 would be only 19 percent. * * *

"There is no effective competition between 'railroad' companies, even though there is a range of 35 cents between the highest and lowest of the circular prices for the same size of coal. * * *

"Real benefits have flowed to the public from strongly financed companies * * *. The anthracite mines have conserved the country's coal resources by steadily increasing the percentage of coal in the ground recovered and sent to market; they have economized in the capital employed by a closer adjustment of mine capacity to production and in man power by largely eliminating the cost of idle days for men as well as for plants, resulting in a corresponding improvement in the economic condition of the mine workers."

Royalties.—"About a third of the output of anthracite is mined under leases in which the operator pays the land owner a royalty. The royalties collected on fresh mined coal range from as low as 12 cents on old flat-rate leases to as high as $1.50 per ton on percentage leases and on certain stripping operations the rate is even higher. The royalty rate of the Girard estate leases for 1921 averaged $1.27 per ton on all coal mined—2,983,723 tons * * *.

"Among the independent operators the great bulk of the output—at least 70 percent—is produced from leaseholds under royalty. Among the 'railroad' companies the great bulk of the output is produced from lands in fee. * * *."

Cost of Mining.—"The commission has obtained reports on costs sales realization and margins covering the period January 1, 1919, to March 31, 1923, from all but one of the important operators. * * * The mine cost as it stands on the books of each mining company and as reported by the company represents the average cost of the total output, all sizes of anthracite. Egg coal has, for example, at least five times the market value of barley, but these sizes are mined together and their costs can not be separated. * * *

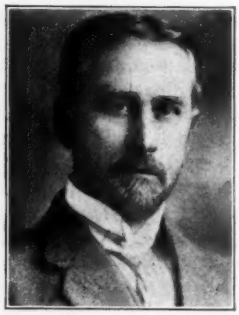
"In the ten years under review by the commission's accounting staff, labor costs in the production of fresh mined coal have risen from $1.56 a gross ton in 1913 to $4.12 in the first quarter of 1923, the cost of supplies from 35 to 71 cents, and general expenses from 32 to 92 cents. Labor cost bears about the same relation to total mine cost in 1923 (71.1 percent) as in 1913 (70 percent); supplies cost relatively less in 1923; and general expenses are relatively higher in 1923. * * *

"The total range in the average mine cost of a ton of coal with the nine railroad companies has been from $2.23 in 1913 to $5.75 in 1923. The three independent companies for which there are continuous cost records the corresponding change has been from an average cost of $2.50 in 1913 to $6.32 in 1923. Examined in detail the increase in mine costs for these twelve companies was moderate until 1918, when for three successive years there was an annual jump of approximately a dollar. To these increases, changes in wage rates, rising prices for supplies and increasing charges for royalty and depletion have all contributed. * * *

"Even within the few counties in which anthracite is found there is a conspicuous range of natural conditions involving economic and even social consequences * * *. The contrast is great between some of the level-lying beds of moderate but fairly consistent thickness under the broad Wyoming Valley, where the mining and underground haulage present relatively simple problems to the engineer, and the steeply pitching or overturned and faulted beds of the changing thickness in the Schuylkill field, where crushed coal and treacherous roof multiply the difficulties of mining and increase the unavoidable waste. * * *."

Recovery of Coal.—"The engineering staff of the commission has carefully

studied the subject of waste and has determined the proportion of the coal deposit which is lost in the process of mining and preparation. It is gratifying to find that while forty years ago estimates of the percentage of recovery were



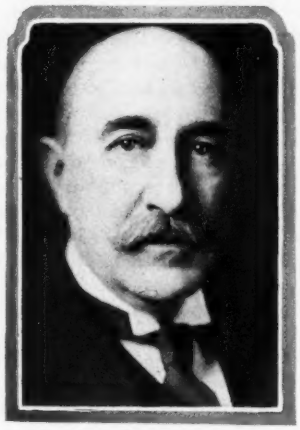
Charles P. Neill

27 percent to 40 percent and twenty years later the Roosevelt Commission predicted that with better mining methods and the utilization of former waste material a 50 percent recovery could be expected in the near future, the present study shows that this estimated higher recovery has been in fact exceeded and that the practice of today in mining and preparing the coal for market yields an average recovery of about 61 percent, the greatest percentage of waste being in the Southern field, where the steeply pitching beds of crushed coal place a natural limitation on recovery. It must be kept in mind, however, that this type of conservation engineering which increases the percentage of recovery and adds to the expected life of the limited reserves of anthracite in the ground may involve an increase in the cost of mining. * * *"

Clarke Howell

Freight Rates.—"The item of freight rates alone in the examples cited takes from 16 to 30 cents of the consumer's dollar. The question whether or not the existing freight rates on anthracite are excessive is one that comes under the jurisdiction of the Interstate Commerce Commission. * * *

"As so large a part of the anthracite consumer's dollar goes as freight charges, a material reduction in the price of coal might come through a reduction of freight rates. With a keen appreciation of the public demand for the scrutiny of every item in the cost of anthracite, the Coal Commission urges upon the Interstate Commerce Commission, the duly



John Hays Hammond

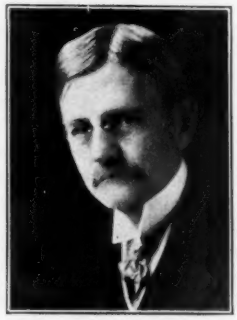
constituted agency of the federal government, a reexamination of the reasonableness of anthracite freight rates. The pending separation of the carriers and the mining companies in the three large systems makes opportune the reconsideration of the subject by the Interstate Commerce Commission."

Wholesale Distribution.—"Of the anthracite domestic sizes, 24 percent is sold directly from the mine to retailer or consumer and 53 percent through sales agents and 20 percent is handled by wholesalers whose margins vary widely from city to city and from year to year. Reports from representative wholesalers in five cities showed an average margin of 23 cents in November, 1921, and over 27 cents in November, 1922. In these two months the high and low margins for individual companies were, in 1921, 70 cents and 18 cents, and, in 1922, $1.40 and 6 cents. One feature of this wide spread is the fact that the wholesale trade has to dispose of steam sizes, sometimes at a loss, along with the more profitable domestic sizes. The trend of wholesale gross margins in the last three years has been downward with a decrease of 13 cents from 1920 to 1921 and a recovery of 3½ cents in 1922. * * *"

George Otis Smith

Dr. E. T. Devine

Retail Distribution.—"The expense of distributing the coal is the item of cost nearest the home, and yet it is an item that the consumer may overlook. The city retailer may have provided extensive storage in his coal yard or pocket and delivery trucks sufficient to meet promptly every call for the immediate delivery in mid-winter; the small dealer may own neither yard nor delivery equipment, simply selling from the car to the customer's own truck or a hired truck. Such a variation in service naturally involves a variation in gross margin or difference between the cost of anthracite on the dealer's siding and his price to the consumer. The field agents of the commission have found that these margins are as high as $3.50 or more per ton and as low as $1.00 or even less. The larger service rendered to the city consumer includes unloading, storage,



Thomas R. Marshall

screening and delivery. In five of the larger cities, examination of the books of the dealers handling anthracite coal almost exclusively showed that the average gross margin per ton was $2.88 in 1920, $2.55 in 1921, and $2.41 in 1922. The average expenses of these dealers for these three years were $2.39, $2.26, and $1.99, respectively, showing a decrease since 1920 and net margins of 49, 29, and 42 cents, respectively, for the three years. * * *"

Prices.—"The well-known increase in anthracite prices in the last ten years or so is frequently attributed to profiteering and frequently to increases in wages, but there have been insufficient facts available with which to measure the justice of either accusation. How great has been the actual rise in price, how this rise is related to the general price movement, what items are included in the price the consumer pays for his coal, and especially what profits come out of that price, are questions properly asked of this commission.

"The average retail price of stove anthracite in 1913 in Boston and Washington was $8.25 and $7.50, respectively, the former, however, being the price of the short or net ton, the latter that of the long or gross ton. In 1923, the corresponding retail prices are $15.00 for Boston and $15.39 for Washington. Since 1913 freight rates from anthracite mines to these two cities have increased $1.25 and $1.14. Eight of the larger coal companies, most of them still closely affiliated with the railroads, are grouped together in price quotations and their product is known as 'company' coal, in contrast with the 'independent' coal produced by one hundred or more smaller 'individual' companies. In 1913 the average mine price of stove anthracite was $3.53 a gross ton; today the quotations are $8.00 to $8.35 a gross ton for 'company' and $8.50 to $11.50 for 'independent' coal.

"Thus in ten years both the retail and the wholesale prices of stove coal have practically doubled. This in line with the general advance in commodity prices * * *."

Having thus stated the facts—although not in the order here set down—the commission proceeds to draw its various conclusions and to make its recommendations, as follows:

Conclusions.—"Both the Congress and the American people are concerned in the questions whether in the anthracite industry a reasonable return on investment can be paid to the owners and operators, decent living conditions and an adequate wage based on American standards furnished to the mine workers, a proper return made to the railroads and the dealers, and coal be delivered to the patrons of the industry at lower prices than those now charged. Furthermore, they want to know what can be done to assure an ample supply of anthracite with a constant flow from mine to consumer. Peace with justice in the industry is the first requisite and economy is the second. To these inquiries the Coal Commission has directed its attention."

OWNERSHIP OR REGULATION?

"The fundamental fact in the anthracite coal problem is that heretofore these limited and exhaustible natural deposits have been in the absolute private possession of their legal owners, to be developed or withheld at will, to be leased for such royalties as could be exacted, to be transported and distributed at such rates and in such manner as a double-headed railroad and coal combination might find most advantageous from the point of view of private profit, to be sold at such prices as could be maintained by the restriction of output and the elimination of independent competitors, through such means as the maintenance of freight rates burdensome except to those who, owning both mines and railroads, could afford to be indifferent as to whether their revenue came from the one source or the other.

"The commission does not recommend the abolition of existing property rights, however much might be said for the view that mineral deposits should have been held from the beginning as national rather than individual property. The commission does not recommend government ownership either by purchase at present value or by expropriation. It does, however, hold the view that a limited natural monopoly like anthracite, held by a relatively small number of individuals, estates, and companies, and supplying a necessity of life for millions of our people, can not continue to be treated as if it were not affected by a public interest.

"Coal is quite as much a public necessity as gas, street railway service, or any other service or commodity that has been brought under public regulation. There should be no secrets from the public in regard to mining costs, profits, salaries, wages, or corporate relations. Banks and insurance companies are privately managed because we find by experience that they can be managed more efficiently and economically on the principle of individual responsibility. But, like railroads, they are required to report to a public authority and they are subject to such regulation in the public interest as experience may show to be necessary and public opinion may from time to time approve. The guiding principle in such enterprises is no longer maximum profit to owners but maximum service to the public.

"The time has certainly come to establish the same controlling idea in the anthracite coal industry. There is not as yet a sufficient basis in knowledge or experience to determine what form of control or regulation will ultimately be most advantageous. What is clear is that in the operation of coal mines, as in the operation of railroads, telephones, water companies, or banks, the public interest must be respected and served, and that this requirement places limitations on the rights of owners of coal lands, operators, mine workers, carriers, and dealers. The commission believes that the principle of individual and corporate responsibility should be maintained as most likely to insure economical and efficient management of the industry, and that the public interest may be adequately safeguarded by the creation of a governmental authority with power to require financial and operating reports, to prescribe uniform methods of cost accounting, and to determine the conditions on which coal may be shipped in interstate commerce.

"The President of the United States should be authorized by act of Congress to declare that a national emergency exists whenever through failure of operators and miners in the anthracite industry to agree upon the terms of employment or for any other reason there is a suspension of mining operations, seriously interrupting the normal supply of anthracite fuel in interstate commerce; and to take over the operation of the mines and the transportation and distribution and marketing of the product, with full power to determine the wages to be paid to mine workers, the prices at which the coal shall be sold, and, subject to court review, the compensation to be paid to land and mine owners.

"On these subjects more definite recommendations will be reserved for the final report of the commission, since they apply to both branches of the industry."

Recommendations.—1. "The commission recommends that in the next agreement there should be a provision for a continuing umpire and that he or an assistant named by him should sit with the Conciliation Board at all its meetings, but without a vote.

2. "In view of the delays that have been caused by the absence of members of the Conciliation Board, alternates of like standing in the industry should be selected with authority to act in the absence of the original member.

3. "The operators' group should appoint a full-time representative and all necessary assistants to consider jointly at the mine with the district officers of the union each case before it is appealed to the Conciliation Board in the hope of securing a local agreement, arriving at a better understanding by each side of

the difficulties and problems of the other, and thus producing a mutual feeling or respect for the other's opinions and each obtaining the outlook of the other upon the problems.

4. "So many changes have taken place since 1903 that the agreement should provide for a joint committee to work out a restatement of the whole agreement in the terms of today, and this agreement should be specific enough to be the code by which all persons having anything to do with the settlement of grievances shall be bound.

5. "If the Board of Conciliation does not clearly understand the facts involved in any case, it should appoint an examiner from each side immediately to investigate and furnish it with all the facts.

6. "The agreement should provide for penalties for the breach thereof by either party, and the method by which such penalties are to be enforced.

7. "The renewed agreements have too rigidly retained the practices and conditions of 1902 and have not had adequate flexibility. An industry which is necessarily constantly changing can not tie itself inflexibly to conditions of twenty years ago without hampering the management and working injustice to miners. A second joint committee should be provided for in the next agreement and directed to make an engineering study of the elements of the job of mining anthracite coal, for the purpose of building up a scientific and more equitable basis for rate making. Until, however, such committee shall disclose fundamental facts which shall form a decidedly better basis, the old 1903 base should, of course, be retained, for however inequitable the basis of 1903 with its subsequent modification, it is better than no basis at all.

8. "The expiration of the contract in the anthracite region should not coincide with the expiration of that in the bituminous region. The contract should run for a definite period of time with the proviso that it shall be deemed to be renewed for a like period of time except as to such provisions thereof in which notice of a desired change shall have been given by either party to the other at least ninety days before the renewal date. Upon these proposed changes the parties shall immediately confer and if, sixty days before the date fixed for the renewal of the contract, they have been unable to agree, they shall report such fact to the President of the United States, specifying clearly the controverted points. The President shall thereupon appoint a person or persons to inquire into and make public a report upon all the relevant facts in controversy before the date of such renewal shall have arrived.

"The commission recommends at this time no punitive legislation. It awaits with interest whether the next agreement entered into shall show a cooperative spirit, a clear idea of partnership on the part of all concerned in it, and a proper conception of the rights of the American people. These rights in the anthracite region are no different from those in the bituminous, and the judgment of the commission will be very largely affected by what takes place in the present negotiations. It calls attention to the fact, however, that some of the material from both the operators and the United Mine Workers, presented to it is calculated even if not intended to inflame the public mind for or against one of the parties. This is more applicable to the bituminous controversy. These charges and counter-charges are most unfortunate at this period of negotiations. Instead of preparing the public mind as to what will be real justice to the operator and the miner and what will stabilize the industry, there has been too much of epithet, too little of argument. The commission recommends that each side forget past differences and grievances and attack the problem in the spirit of justice and fair dealing, not only between themselves, but with due regard for the rights and sensibilities of the American people. The commission hopes that a constructive view will be taken, not controversial in its character, so as to assure a continuous output from the anthracite mines and the scrupulous keeping of the agreement. If it must fix responsibility because the old order has not changed, it can not do so without taking into consideration the bituminous industry.

"In conclusion, the commission invites attention to the specific recommendations contained in this report on the following subjects:

1. "Governmental Regulation.
2. "Publicity of Accounts.
3. "Authorization of President to Declare National Emergency.
4. "Uniform Standard Ton.
5. "Reexamination of Anthracite Freight Rates by Interstate Commerce Commission.
6. "Reduction in Number of Sizes.
7. "Inspection of Quality.
8. "Larger Use of Substitute and Supplementary Fuel.
9. "Excessive Hours.
10. "Readjustment of Wages of Miners' Laborers and of the Conditions of Their Employment.
11. "Readjustment of Royalties.
12. "Power to Punish Conspiracy against General Welfare.
13. "Personal Manager.
14. "Assimilation of Aliens.
15. "Alternates for Members of Conciliation Board.
16. "Continuing Umpire.
17. "Examiners for Conciliation Board.
18. "Full Time Representative of Operators.
19. "Joint Committee to Prepare Industrial Code.
20. "Joint Committee to Secure Scientific Analysis of Jobs.
21. "Penalties for Breach of Agreement."

THE FUNDAMENTALS OF INDUSTRIAL PEACE

THE nine major recommendations made by the Advisory Committee on Industrial Relations of the Associated Industries of Massachusetts in its "Code of Relations" between management and employee, as the result of "many months of earnest study and consideration," are so obviously necessary to industrial peace that it is difficult to believe that any progressive business enterprise would ignore them.

Yet, it is quite apparent that many enterprises, mining and otherwise, have failed to observe these simple rules. In addition to the major coal and rail strikes, there were 1,039 strikes during 1922, according to the Open Shop Association at San Antonio, Texas.

It is high time that leaders in all branches of industry formulate a national "Code of Relations" and that all unite to secure industrial peace. The mining industry already has announced its platform for industrial peace through the Division of Industrial Cooperation of the American Mining Congress and seeks the cooperation of allied industries.

In the first groping effort of the mining industry to give its workers what it termed "advantages," paternalism defeated the result strived for. The honest laboring man seeks only that which he may attain by his own individual merit, and is far happier with a mutual responsibility in industry than in receiving what he considers concessions in lieu of wages.

The Division of Industrial Cooperation, while not at a stage where definite recommendations can be made, is making an earnest and intelligent survey of the various forms of industrial relations in the mining industry through 22 State committees. This Division will have some very interesting facts to present to the 26th Annual Convention of the American Mining Congress at Milwaukee, September 24 to 29, where a round table discussion of this subject will be had and where another definite forward step will be made in the efforts of this Division to establish industrial peace in the mining industry.

COMPTROLLER'S SILVER DECISION NOT MANDATORY

Acting Secretary Gilbert's Revocation of Allocation of Silver to the Mint Was Not Required by Ruling—Dislocation of Silver Industry Resulting From Decision Not Required and Causes Protest.

WHEN the appointment of a Silver Commission was first proposed in Congress, it was the thought of everyone that this work would be entirely directed toward the working out of a future policy for silver. However, when the Treasury Department announced in March that the remaining silver to be purchased under the Pittman act would be cut by more than 10,000,000 ounces by the revocation of allocations to the Director of the Mint, the silver producers were, naturally, deeply concerned. The first hearings before the Silver Commission, which were held in May, therefore took up this phase of the question.

Senator Oddie, the chairman of the Commission, then appointed Senator Pittman as chairman of a subcommittee to consider purchases under the Pittman Act, who, being the author of the act, has taken a vigorous interest in the fulfillment of its provisions.

Undersecretary Gilbert of the Treasury was the first witness summoned before the Commission. Senator Pittman's questions and Acting Secretary Gilbert's testimony covered the points of possible inclusion of foreign silver in that purchased by the Treasury Department under the Pittman Act, the amount of deductions for metallurgical losses, and the relation between miners' affidavits and volume of silver tendered by the smelters. The discussion and differences of opinion between Acting Secretary Gilbert and the commission were rather brisk.

John G. Kirchen, president of the Nevada Mine Operators' Association, testified with particular reference to the problem of tenders from the producers of doré bullion. He was followed by F. H. Brownell, vice-president of the American Smelting and Refining Company, who testified in careful detail concerning the operation of American smelters, smelters handling mixed ores, and the ratios of metallurgical losses. C. F. Kelley, president of the Anaconda Copper Company, testified with regard to deductions for metallurgical losses and treatment charges and their relation to each other. F. F. Colcord, of the United States Smelting, Refining and Mining Company, went into the same questions. At subsequent hearings, Acting Secretary Gilbert again appeared, also Director Scobey of the Mint, and Miss O'Reilly, chief clerk and assistant director of the Mint.

Following the suspension of purchases by the Mint under the Pittman Act and the termination of the open tenders to be made under it early in June, detailed consideration was given to the problem—and to all matters of contradictory opinion which had developed—at the meeting of the Western Board of Governors of the American Mining Congress at San Francisco June 12 to 14. The result of this consideration was the adoption of the following resolution:

"RESOLUTION NO. 2

"INTERPRETATION OF THE PITTMAN ACT

"*Whereas*, the legality and propriety of the action of the Department of the Treasury in revoking allotments of silver for subsidiary coinage provided for by the Pittman Act have been seriously questioned by silver producers of the West; now, therefore, be it

"RESOLVED, That the Western Division of The American Mining Congress, in annual conference at San Francisco, Cal., June 11-12, 1923, record the opinion that the matter rests upon judicial interpretation of the Pittman Act and upon that alone. It therefore urges that the executive officers of The American Mining Congress, in conjunction with the producers of Western States, immediately take such steps as may be necessary to bring the matter before the proper courts for disinterested consideration and judicial action, to the end that a situation which has caused producers to question the good faith of the government may be clarified and the silver producers receive, fully and exactly, the benefits provided under the act, regardless of the action of a department that is wrongfully endeavoring through widespread propaganda to deceive the people into believing that producers seek an unfair interpretation of the act.

"AND BE IT FURTHER RESOLVED, That copies of this resolution be forwarded to the President, the Secretary of the Treasury, the chairman of the Senate Gold and Silver Inquiry Commission and congressional delegations from all the Western States.

"(Adopted unanimously June 12, 1923.)"

Copies of this resolution were sent to the Acting Secretary of the Treasury with the thought that the Treasury Department would be glad to submit the controversy to judicial determination. Acting Secretary Gilbert wrote the American Mining Congress the following letter, and gave interviews to the press in criticism of the resolution:

"TREASURY DEPARTMENT
"WASHINGTON
"June 30, 1923.

"Dear Sir:

"I have received your letter of June 26, 1923, enclosing a copy of a resolution adopted by the Board of Governors of the Western Division of the American Mining Congress at their annual meeting held at San Francisco, California, June 12, 13 and 14, 1923, with respect to the administration of the Act of Congress approved April 23, 1918, sometimes known as the Pittman Act. I note that the resolution urges the executive officers of the American Mining Congress, in conjunction with silver producers of the Western States, to take immediate steps to bring before the proper courts the "legality and propriety" of the cancellation by the Treasury Department of allocations of silver for subsidiary coinage under the act, to the end that the question may be settled "regardless of the action of a department that is wrongfully endeavoring through widespread propaganda to deceive the people into believing that producers seek an unfair interpretation of the act." This resolution is quite obviously part of the campaign of misrepresentation that various interested parties have been carrying on for the past two or three months in an effort to make silver producers believe that they have been unfairly treated, and I am surprised that it would be adopted by the Board of Governors of the American Mining Congress without the slightest effort to ascertain the facts. The Treasury's action in respect to the allocations of silver for subsidiary coinage is clear and beyond dispute. It rests upon the decision rendered November 20, 1922, by the Comptroller-General of the United States, which is conclusive and binding upon the Department, and is supported by every consideration of equity and common sense. The Treasury's position in the matter is set forth in my letters of May 9 and May 31, 1923, to Senator Pittman of Nevada, copies of which, with a copy of the Comptroller-General's decision, are enclosed herewith.

"The Treasury Department is not engaging in any propaganda in this matter, and has no occasion to do so. It has taken action under the law, upon the advice of the highest constituted authority,

and has stated its position in the clearest possible terms. Its action fully satisfies the purchase provisions of the Pittman Act and saves to the people of the United States at least $5,000,000. It would be more becoming, it seems to me, if those who are trying to have this sum diverted out of the public Treasury to promote the special interests of the silver industry, would tell the truth in the propaganda which they are carrying on and present the case on its merits, without persistently misrepresenting the Treasury's attitude.

"Very truly yours,
"(Signed) S. P. GILBERT, JR.,
"*Acting Secretary of the Treasury.*
"J. F. Callbreath, Esq.,
"Secretary, American Mining Congress,
"Washington, D. C."

These charges and this criticism, of course, necessitated the following letter of denial from the Mining Congress:

"THE AMERICAN MINING CONGRESS,
"MUNSEY BUILDING,
"WASHINGTON, D. C.,
"July 21, 1923.

"Mr. S. P. Gilbert, Jr.,
Acting Secretary of the Treasury,
Treasury Department,
Washington, D. C.

"Sir:

"Upon my return to Washington I find your letter of June 30, in which you take exceptions to the resolutions adopted by the Board of Governors of the Western Division of the American Mining Congress at their meeting held in San Francisco June 12-14, 1923. I also observe the widespread interviews which you have authorized in quotation of your letter to me and in criticism of these resolutions.

"If, as you contend, the resolution was not justified, surely your letter and the publicity which you have given it amply justify such a resolution, for the major contentions therein are the two contentions to which the mining industry has objected as emanating from the Treasury Department during this entire controversy:

"First. That the decision of the Comptroller General is mandatory upon you in compelling revocation of silver allocated to the Director of the Mint; and,

"Second. That such revocation saves the taxpayers of the United States $5,000,000.

"Each of these two statements is that type of statement which is most difficult of contradiction—a half truth.

"That decisions of the Comptroller General of the United States are mandatory upon the officials of the Treasury Department we readily concede as an abstract fact. That the opinion of the Comptroller General in this particular instance merely permits the action you have taken and does not in any way make it mandatory is apparent from the language of the opinion itself.

"In response to the request contained in your letter to the Comptroller on November 2, 1922, in which you ask, 'In these circumstances and in order to avoid this loss in its current operations, the Treasury would like, if possible under the law, to revoke the allocation of the remaining 10,247,976.52 fine ounces of silver and restore this amount of silver bullion to the standard silver dollar account,' the Comptroller in his letter to you of November 29, 1922, stated the following conclusion: 'There appears sufficient authority therefor under the act if you conclude that this be done.' It is fully apparent that there is nothing in such an opinion.

"The further reiterated statement that the Treasury Department's 'action fully satisfies the purchase provision of the Pittman Act and saves to the people of the United States at least $5,000,000' is properly objected to by the silver producers. This is an appealing statement to the average reader who, because it comes from the Treasury Department, does not question its accuracy and is not familiar with the fact that the $5,000,000 so retained by the Treasury Department does not belong to the Treasury Department as agent for the body politic, but to the silver producers who produced silver under the guaranty of the Pittman Act. The Pittman Act provides only for the purchase of that silver at $1 per ounce, which has been previously disposed of by sale or allocation by the Treasury of the United States at a return equal to, or in excess of $1 per ounce, and it is in no wise a bounty to silver producers, as you have stated.

"You speak further of the interest charge saved to the Government by the revocation of this allocation of 10,247,976.52 fine ounces of silver. In considering the question of interest there should also be considered the fact that in the operation of the Pittman Act the Government of the United States disposed of 200,000,000 ounces of silver to foreign governments immediately after April 23, 1918, and immediately began to receive interest on the payment therefor and was only safeguarded in doing so by the assurance there would be produced by American silver miners an equivalent amount to replace this silver in the vaults of the Treasury. The United States Government therefore profited by the interest on this entire amount of 200,000,000 ounces during its period of replacement.

"Any interest saved by this revocation is insignificant in comparison to this huge amount set forth above.

"The Mining Congress is not primarily taking issue with the Treasury Department or any of its officials, but is making every effort, as you suggest, to ascertain all the facts involved.

"It is our thought and it was the gist of the resolutions to which you took objection that these facts could best be determined in a court of law having proper and competent jurisdiction. Surely you will agree with us that such a procedure would be more effective in a determination of the issues involved and more in harmony with the dignity of the Treasury Department than a continuance of controversy through the public press.

"Very truly yours,
"(Signed) J. F. CALLBREATH,
"*Secretary.*"

Detailed letters of protest were filed with the Acting Secretary by Senator Pittman prior to his departure for the West. At this writing the Treasury Department has taken no further action looking toward reconsideration of the decisions complained of.

Concerning the future status of silver, the Silver Commission has called a conference of all silver producers to be held at Reno, Nev., September 4-6, to consider ways and means and especially to consider a silver export association. The outcome of this meeting will be awaited with great interest. As a basis of the considerations involved, no more comprehensive statement has been made than that prepared by F. H. Brownell, vice-president of the American Smelting & Refining Company. Because it goes into the fundamental considerations necessary in the formation of such an association so adequately, it is here printed in full, as follows:

A SILVER EXPORT ASSOCIATION

The subject of a Silver Export Association has been much before those interested in silver in recent months and is likely to remain a subject for most serious discussion during the remainder of the year.

In a pamphlet published last spring, the writer of this article expressed the opinion that, under present conditions of the law, any association of this sort would not be legal, and, if legal, could not be financed. So long as the laws remain as at present, I see no reason for changing that opinion, but I now believe there is an opportunity to have such a change in the law as to make financing possible, if an association can be organized along lines that will appeal to a sufficient number of silver producers. The reason for this belief is because of the very important fact that the United States Senate has recently appointed a

committee to investigate and report to Congress by January 1, 1924, upon—

1. The causes of the continuing decrease in the production of gold and silver.

2. The causes of the depressed condition of the gold and silver industry in the United States.

3. The production, reduction, refining, transportation, marketing, sale, and uses of gold and silver in the United States and elsewhere.

4. The effect of the decreased production of gold and silver upon commerce, industry, exchange and prices.

The members of the committee are:
Senator Oddie, of Nevada, Chairman.
Senator Pittman, of Nevada.
Senator Walsh, of Montana.
Senator Gooding, of Idaho.
Senator Sterling, of South Dakota.

The committee is quite likely to carefully consider the frequent suggestion that a Silver Export Association is a promising means of improving the situation. Their attention has doubtless been called to the fact that, under the present Webb Act, such an association might (if not would) be deficient in power in respect to—

(1) Acts avowedly intended to control and, if possible, increase the price of silver in the United States, and hence in contravention of the Sherman Law.

(2) Ability to include silver produced from territory outside of the United States.

It is reasonable to suppose, however, that if the present law is inadequate Congress, on the recommendation of the committee, will pass a law giving all the necessary powers.

I shall, therefore, assume in this paper that a Silver Export Association can be organized, having all the powers required and having no fear of the Sherman Law or any other of the present statutes prohibiting combinations of any kind. This assumption, to my mind, requires an act of Congress.

Assuming such an association, the following questions naturally arise:

(1) How much of the world's production of silver can such an association reasonably hope to handle?

(2) What steps can such an association take to enhance and stabilize the price of silver?

(3) What financing will be necessary?

Taking these up in order—

I.

HOW MUCH OF THE WORLD'S PRODUCTION OF SILVER CAN SUCH AN ASSOCIATION REASONABLY HOPE TO HANDLE?

The world's production of silver and its principal sources from the years 1901 to 1922, inclusive, is shown in the following table:

	United States	Mexico	Canada	South America	Australasia	Other Countries	Total
	(In millions of ounces)						
1901	55.2	57.6	5.2	18.6	10.2	26.2	173.0
1902	55.5	60.2	4.3	16.1	8.0	18.7	162.8
1903	54.5	70.5	3.1	13.0	9.7	17.1	167.7
1904	57.7	60.8	3.7	12.8	14.5	14.7	164.2
1905	56.1	65.0	6.0	10.5	15.0	19.7	172.3
1906	56.5	55.2	8.6	11.3	13.9	19.6	165.1
1907	56.5	61.1	12.8	15.9	18.0	19.9	184.2
1908	52.4	73.7	22.1	17.0	17.2	20.7	203.1
1909	54.7	74.0	27.5	16.0	16.4	23.5	212.1
1910	57.1	71.4	32.9	14.5	21.6	24.2	221.7
1911	60.4	79.0	32.8	14.4	16.6	23.0	226.2
1912	63.8	74.6	31.6	16.1	14.7	25.6	226.4
1913	66.8	55.5	31.5	14.3	17.1	25.3	210.5
1914	72.5	26.1	28.4	10.4	14.7	24.7	176.8
1915	75.0	22.9	26.6	13.7	8.8	26.0	173.0
1916	74.4	29.8	25.5	15.6	9.7	25.1	180.1
1917	71.7	42.0	22.2	15.5	10.1	25.9	187.4
1918	67.8	62.5	21.4	14.7	10.7	27.1	204.2
1919	56.7	65.9	16.0	14.8	7.6	20.8	181.8
1920	55.4	66.5	13.3	14.6	2.2	21.2	173.2
1921	53.7	64.5	13.0	15.5	5.4	19.8	171.9
1922	55.5	81.1	17.6	17.7	12.0	22.2	206.1
Averages for period	60 4	60.0	18.5	14.7	12.5	22 3	188.4

It will be noted that the percentages of world's production are as follows:

United States	32.06%
Mexico	31.85%
Canada	9.82%
South America	7.81%
Total North and South America	81.54%

Three companies now sell between 50 percent and 60 percent of the world's total yearly new production, viz.:

American Smelting & Refining Company.

Anaconda Copper Mining Company.

United States Smelting, Refining & Mining Company.

From 15 percent to 20 percent additional is probably sold by the following American companies

American Metal Company.

Bunker Hill & Sullivan Mining & Concentrating Company.

Cerro de Pasco Copper Company.

Nichols Copper Company.

Nipissing Mines Company.

Phelps Dodge Corporation.

It is believed that the more important Association of unquestionable legality and organized along lines appealing to them. Probably great diversity of requirement would be found. We will suppose them reconciled each with the other, and, if so, the association might easily and possibly all of the companies above named would go into a Silver Export start with possibly 70 percent of the world's total yearly output of silver; if successful, most of the remaining silver production would be induced to join, and in a few years it might hope to control around 80 to 90 percent of the world's yearly net production.

II.

WHAT STEPS CAN SUCH AN ASSOCIATION TAKE TO ENHANCE THE PRICE OF SILVER?

Let us set out some pertinent facts before answering this question.

A table of the prices of silver in New York City for the last twelve years shows ranges as follows:

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920*	1921	1922
Jan.	53.79	56.22	62.93	57.57	48.85	56.77	75.63	88.70	101.12	132.83	65.95	65.45
Feb.	52.22	59.04	61.64	57.51	48.48	56.75	77.58	85.72	101.12	131.29	59.32	65.31
Mar.	52.74	58.37	57.87	58.07	50.24	57.93	73.86	88.08	101.12	125.55	56.03	64.38
Apr.	53.33	59.23	59.49	58.52	50.25	64.41	73.87	95.35	101.12	119.53	59.34	66.57
May	53.31	60.88	60.36	58.17	49.91	74.27	74.74	99.50	107.11	102.58	59.85	71.15
June	53.04	61.29	58.99	56.47	49.03	65.02	76.97	99.50	110.44	90.82	58.51	71.15
July	52.63	60.60	58.72	54.68	47.52	62.94	79.01	99.62	106.39	91.93	60.26	70.24
Aug.	52.17	61.61	59.29**	54.34	47.16	66.08	85.41	100.29	111.37	96.18	61.60	69.40
Sept.	52.43	63.08	60.64	53.29	48.68	68.51	100.74	101.12	114.54	93.65	66.15	69.50
Oct.	53.34	63.47	60.79	50.65	49.38	67.85	87.33	101.12	119.14	83.48	70.97	68.01
Nov.	55.72	62.79	58.99	49.08	51.71	71.60	85.89	101.12	127.91	77.64	68.23	65.18
Dec.	54.90	63.37	57.76	49.37	54.97	75.76	85.96	101.12	131.98	64.78	65.76	64.62
Av.	53.30	60.83	59.79	54.81	49.68	65.66	81.42	96.77	111.11	100.86	62.66	67.58

*Since June 17 the averages are based on the price of foreign silver, the price of domestic silver being retained at $1.00 by government purchases under the Pittman Act.
**Quotations suspended August 1 to 21.

Monthly average prices of silver in New York, in cents per fine ounce.

No reliable table exists of the amount of silver consumed in the arts, such as photography, silver plating and other uses which, in effect, destroy the silver. Best estimates place this consumption at from 10,000,000 to 20,000,000 ounces per annum. From twenty to thirty million ounces per annum are probably consumed in the manufacture of articles which do not destroy the silver (except for abrasion loss), such as tableware, toilet articles, ornaments, etc. By far the greatest use of silver is as money, both coined and uncoined.

The Year Book of the American Bureau of Metal Statistics for 1922 (page 83) estimates the total silver consumed

in coinage in the United States and the world from 1914 to 1921 as follows:

	(In fine ounces) United States	World
1914	4,400,885	179,593,224
1915	2,976,024	225,116,911
1916	6,424,149	292,148,559
1917	21,276,122	286,596,805
1918	18,425,915	238,692,502
1919	8,560,716	298,300,518
1920	18,125,805	220,318,663
1921	68,814,302	148,036,313

The same authority (page 83) for the years 1920 and 1921 gives the ounces consumed in coinage by the countries as follows:

	Fine Ounces Consumed 1920	1921
United States	18,125,805	68,814,302
Philippine Islands	276,205	915,643
British Empire:		
Australasia	387,992	1,318,882
British Guiana	.....	5,045
Canada	1,156,014	361,849
Ceylon	228,094	146,086
Cyprus Island	.....	168,178
Great Britain	9,981,945	15,357,260
India	37,343,858	.....
Kenya Colony (formerly East Africa and Uganda)	1,421,467	1,328,652
Sarawak	8,730	.....
Straits Settlements	3,371,875	1,974,292
West Africa	2,122,277	.....
Chile	202,321	330,848
China	115,373,035	35,095,064
Colombia	335,137	524,012
Cuba	976,556	290,175
Denmark	53,315	.....
Egypt	277,187	441,858
France	3,973,555	.....
French Colonies:		
Indo-China	624,938	6,668,178
Tunisia	243	243
Italy:		
Somaliland	446,875	.....
Mexico	17,866,189	7,792,774
Netherlands	.....	903,574
Netherlands East Indies	2,946,063	2,686,626
Norway	868	.....
Persia	284,807	273,898
Siberia	.....	3,883
Siam	887,099	467,059
Sweden	.....	102,215
Switzerland	1,429,200	1,342,262
Uruguay	217,013	321,500
Venezuela	.....	401,955
Totals	220,318,663	148,036,313

These two tables suggest the conclusion, highly important, if true, that, deducting from the world's production the amount of silver consumed in the arts each year, coinage requirements are such as to require all the silver produced from the mines, and in some years to call for a minting of silver which had been previously in commercial or artistic use in some form or other.

The great demonetization of silver for subsidiary coinage in the bankrupt countries of Europe (together with the debasement of such silver as remained in use in many countries) which has occured since the World War, along with the completion of the Pittman Act, may result in a greater production of silver than the needs of coinage. Even if this be true, it is highly probable that as, one by one, the paper currencies of European nations are restored and rehabilitated, silver will be found necessary, to an extent sufficient to again restore the former situation of coinage demands approximating new annual production after allowing for silver used in the arts. Many economists believe that the gold supply is not sufficient alone to stabilize European currencies, especially with the large amount of gold in the United States and the present tendency of the United States to retain its own hoard.

Another interesting fact about silver is that there seems to be less than normal relation between production and price. For convenience, we reduplicate the essential figures of tables on pages 5 and 7 above.

	Total Production (In millions of ounces)	Average Price (In cents per fine ounce)
1911	226.2	53.30
1912	226.4	60.83
1913	210.5	59.79
1914	176.8	54.81
1915	173.0	49.68
1916	180.1	65.66
1917	187.4	81.42
1918	204.2	96.77
1919	181.8	111.11
1920	173.2	100.86
1921	171.9	62.66
1922	150.6*	67.58*

*55 5 oz. U. S. silver produced in 1922 in addition to above were sold at $1 per oz. under Pittman Act.

There are three principal reasons why production and price have so little relation:

(1) Much the larger part of the silver now produced comes in ores bearing also lead, copper, zinc, and other metals. The silver is only one factor to be considered and will, therefore, be produced whenever the combined metal contents—copper, lead, zinc, gold, silver, antimony, etc.—yield a profit on the ore mined.

(2) The demand from India and China materially affects the price levels at which the silver market rules. If crops and other commercial conditions are unfavorable in these countries, the price of silver is apt to fall, and to rise when the reverse is the case. Particularly in late years the governmental conditions in both countries have had an unusually important bearing upon the demand of those countries for silver, and hence upon the price.

(3) The ultimate demand for silver is subject to considerable fluctuation, while production is relatively steady and producers insist on the sale of the silver as soon as available for market.

The demand is inconstant because governments often change their silver requirements from time to time, and also requirements of the chief consuming countries of India and China vary widely because of conditions of crops, highly speculative tendencies of Chinese and Hindu financiers and governmental conditions.

Production, on the other hand, is relatively constant and there is a remarkable insistence on the part of the producer to sell as soon as produced. A large percent of the entire world's production of silver is purchased by smelting companies from mines in the form of ore. Smelters pay for the silver contents of the ore on the date of arrival at the smelter at the then prevailing price. It takes, say, four months in the process of smelting, transporting, and refining before the silver contents of the ore are ready for delivery upon the market. To protect themselves from the loss that might occur, smelting companies have practically universally adopted the policy of selling, each day, the intake of that day, so far as they can. Assuming a relatively steady quantity of silver in process, the refinery output should equal the smelter intake, and this refinery output they, as a rule, sell as rapidly as it is available.

The desire for an immediate sale of the silver not sold in the form of ore to smelting companies, but produced as silver by mining companies, is equally insistent. Mines of this class, as a rule, must sell their product to meet operating expenses or to pay dividends. Silver has fluctuated so violently and the production of any one mine is so small an amount that there has been practically no tendency whatever for mining companies to hold their silver, waiting for a better price. This has been true almost without exception and furnishes a singular contrast to the practice prevailing in almost any other class of commodity. Obviously, any Silver Association would have to be prepared to purchase the silver output of its members and pay therefor at the time of delivery of the silver.

Conclusion—Reaching now the answer to the question, "What steps can a Silver Export Association take to enhance the price of silver?" we may say:

Such an association's function will be to act to some extent (much less than is often supposed) as a reservoir to equalize variation between intake and outgo; to obtain first-hand knowledge of conditions in India and China; to stop such unnecessary reduction in the price as often happens when, in a dull market, many sellers compete for few buyers; and, generally, by its preponderant position, to help in stabilizing and enhancing the price of silver. This result will be especially likely to happen if cooperation can be arranged between the Silver Export Association and the principal financial interests of London, New York and the Far East who are particularly interested in silver, especially such institutions as The Chartered Bank of India, Australia & China; The Yokohama Specie Bank, Ltd.; and Hong Kong & Shanghai Banking Corporation, and the silver brokerage firms of Samuel Montagu & Co., Sharps & Wilkins, Mocatta & Goldsmid and Pixley & Abell.

Certainly it will be difficult to persuade some of the larger producers of silver to join an Export Association unless they are assured in advance of cor-

dial support from their own government, from a majority of the large financial institutions interested in silver and possibly from the Governments of Great Britain an the Far East.

III.

WHAT FINANCING WILL BE NECESSARY?

The trade could not easily be induced to go into any Silver Export Association which had in view any program of buying up the world's output and holding until it got its price. This for two reasons:

(1) The principal use of silver is as money. One of the most important purposes of the association should be to help restore the former use of silver as money and to encourage its continuance by those still using it. Any revival of political feuds, any "strong-armed" method arousing animosity, any effort to compel governments against their wills, would invite inevitable disaster. The friendly cooperation of the chief financial interests of England and of the United States and the friendly attitude of each of those governments must be obtained. English financiers for generations have had what is practically a commission on the sale of the world's silver. This would probably have to be continued to some extent, to be arranged by negotiations. The large English banks engaged in the Oriental business should be interested also. The whole plan and purpose of the association should be to work along lines of cooperation and without arousing antagonism, trade rivalries and political animosity.

(2) There is a large store of silver hoarded, especially in India and China. This might come upon the market at any time. It would be the height of unwisdom to attempt to obtain or control a price based upon control of the supply without taking this hoarded stock into full consideration.

Assuming the proper purpose and plan, a Silver Export Association should be organized with a capital of at least $5,000,000—more desirably $10,000,000. The money should be provided by the mines. The smelting companies would not subscribe that amount of capital corresponding to the silver which they buy in the orde. It is believed, however, that practically all the larger mines could be induced—the organization being formed along the above lines—to take their pro rata share.

The association might very well charge a commission of 1 cent to 2 cents per ounce, which, with an average production of silver of, say, 175,000,000 ounces, would yield a revenue of from $1,750,000 to $3,500,000 per annum, a sum sufficient to take care of the various sales commissions, cover actual expense and build up additional working capital.

In addition to its capital, the association should be in a position to borrow large sums of money, say, up to $50,000,000, from time to time, as might be required. This borrowing should be in the form of short-time loans, which would be retired as the silver is sold. It is not believed that the association would want to accumulate at any one time more than, say, two to four months' output, or, say, 30,000,000 to 60,000,000 ounces.

The association should obviously have the ablest financial advice and management. While it should be free from political control and activities, none the less it might be highly desirable to have upon its board, if possible, representatives of the United States Government and of the British Government to give moral, as well as political support, and to assure the world of the stability and ability of the association.

Assuming the requisite support of the Silver Senate Committee in favor of such an organization and such change in the law as presumed in this paper, it seems quite possible that a Silver Export Association can be worked out, having the friendly cooperation and moral support of the Governments of the United States and of Great Britain and of the important financial interests of each of those countries, particularly those associated in any way with the handling of silver. All this would necessitate the arranging of many serious difficulties and involve an enormous task, but is not beyond the range of feasibility.

I venture to present these views in the hope that the statistics given and the opinions expressed (many of which are obviously personal only) may be of some slight value in the general discussion of the subject. Doubtless many valuable suggestions and much needed information will be brought forth by the Senate Silver Committee and the subject greatly clarified by its investigations and hearings. I, for one, believe that some great, concrete good can come from the activities of that committee.

F. H. BROWNELL,
First Vice-President, American Smelting & Refining Company.
June 25, 1923.

REHEARING ON SILVER ALLOCATIONS DENIED

IN a letter to the Hon. Key Pittman, the Treasury Department has decided that no rehearing on silver allocations is necessary. The Hon. S. P. Gilbert, Jr., Acting Secretary, believes that the matter has been fully considered; has been properly disopsed of, and that no good would come from reopening the case. His letter is:

"TREASURY DEPARTMENT
"WASHINGTON
"July 18, 1923.

"My Dear Senator:

"I received on July 11 your letter of July 9, 1923, requesting the Treasury to petition the Comptroller-General of the United States for a re-hearing upon the question of authority to revoke allocations of silver for subsidiary coinage under the terms of the act approved April 23, 1918, sometimes known as the Pittman Act. I have read your letter and its enclosures, and find therein no new facts that would justify the Treasury in asking the Comptroller-General for a re-hearing. I am, however, sending a copy of your letter and of this reply to the Comptroller-General for his information.

"The statement of facts contained in my letter of November 2, 1922, first submitting the case to the Comptroller-General, was prepared by the Bureau of the Mint on the basis of its records and accounts, and is correct. The Comptroller-General, furthermore, as the chief accounting officer of the Government, had full access at all times to the records and accounts of the Bureau of the Mint, and of the several coinage mints, and at the Treasury's request made independent investigation into the facts before rendering his decision on November 29, 1922. There is no question but that the standard silver dollars involved in the allocations were actually broken up and melted, and this is expressly stated as one of the facts in the Comptroller-General's decision. It was also expressly stated in my letter of November 2, 1922, to the Comptroller-General that the 'allocations of silver for subsidiary coinage under the act were made in part to make up shortages at the individual coinage mints, rather than for the Mint Service as a whole and in part to supply refined silver immediately available for coinage, where the silver already on hand was unrefined.' As to the coinage into subsidiary silver, it must be clear that, once melted into bullion, the silver could not be earmarked and treated separately from other silver in the mints. The silver bullion carried by the mints is held for practical purposes in one mass, separate accounts being kept on the books of the Bureau of the Mint showing the bullion carried in the subsidiary silver bullion account and the standard silver dollar bullion account. Adjustments between these accounts are made from time to time, without physically affecting the silver bullion, in order to reflect the operations of the mints, but

(*Continued on page* 285)

RADICAL TRANSPORTATION SCHEMES INVITE TROUBLE

Transportation Act Should Have Fair Trial Before Further Change—Mining Congress Will Oppose Detrimental Experiments—Efforts of Carriers Accomplishing Favorable Results—Consolidations Not Popular

By McK. W. Kriegh
American Mining Congress Staff

THE railroads are making a supreme effort to expand their facilities; add to their equipment; and, improve operating conditions to an extent which will enable them to meet the needs of the nation's business. This requires investment and long time commitments on capital issues.

The carriers have a right to assume that the transportation act was enacted in good faith. They are attempting, in good faith, to function under it in a manner that will keep pace with the growth of the country's transportation needs. These two facts should have a deterrent effect upon those who are disposed to agitate for the repeal or the radical amendment of the transportation act before it has been given a fair trial under normal conditions.

The Transportation Division of the American Mining Congress recently has been devoting special attention to the trend of the whole transportation situation. It is striving to lay before the Interstate Commerce Commission, legislative committees and agencies of the railroads a full statement of the transportation needs of the mining industry. The Division is convinced that the mining industry has naturally a far greater interest in matters that affect the railroads than it has in those of any other industry. This is so because mining furnishes 65 percent of the aggregate freight tonnage hauled by rail, more than 53 percent of which is raw mine products.

The Big Handicap

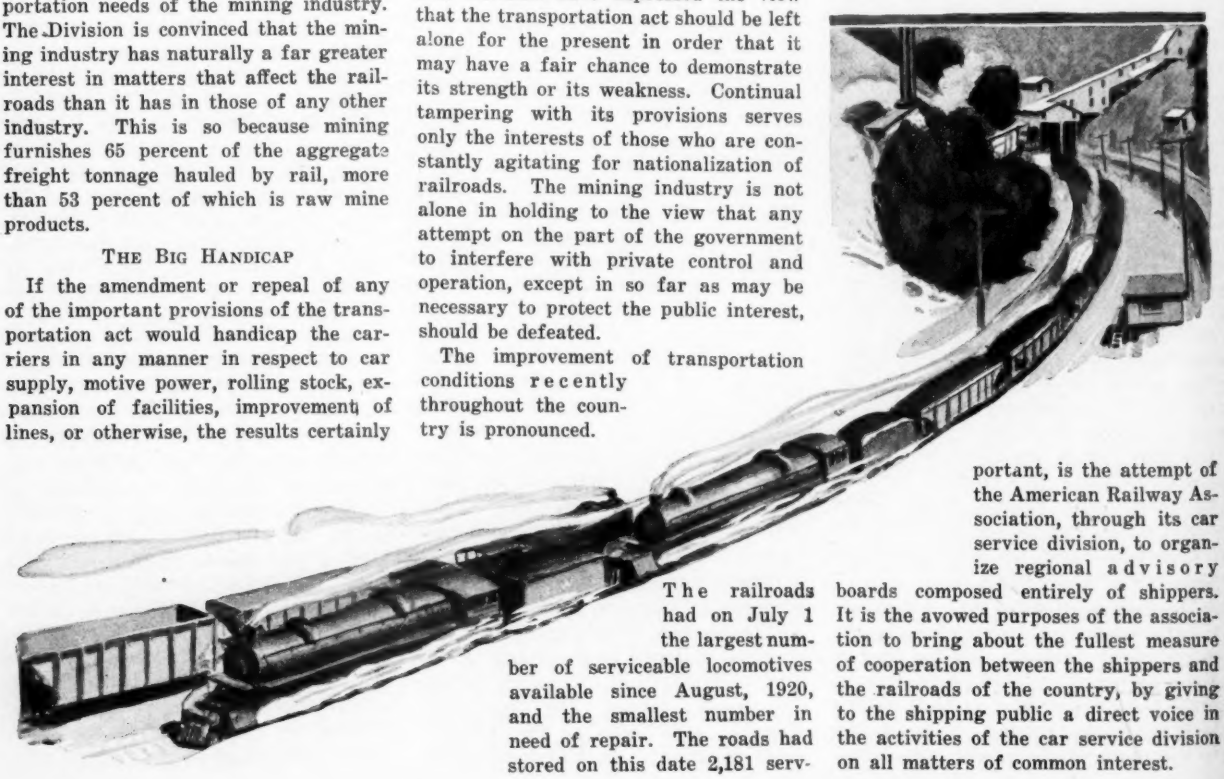
If the amendment or repeal of any of the important provisions of the transportation act would handicap the carriers in any manner in respect to car supply, motive power, rolling stock, expansion of facilities, improvement of lines, or otherwise, the results certainly would be detrimental to the mining industry.

It is recognized that attempts will be made during the next session of Congress to amend the law. If amendments are passed, the carriers will have to adjust their affairs to meet new statutory requirements. And the readjustments which will undoubtedly become necessary will come squarely on top of a series of readjustments required by the 1920 law and previous measures. The situation will continue, as it has for several years past, in a state of uncertainty, and constructive policies which are being put into effect at the present time will be suspended in their operations until it is determined that they will be suited to the new conditions imposed. Thus, the railroads will be compelled to again proceed by a series of experiments through another period of uncertain groping around, to find solution for their problems.

Fair Trial Demanded

A number of correspondents of the American Mining Congress Transportation Division have expressed the view that the transportation act should be left alone for the present in order that it may have a fair chance to demonstrate its strength or its weakness. Continual tampering with its provisions serves only the interests of those who are constantly agitating for nationalization of railroads. The mining industry is not alone in holding to the view that any attempt on the part of the government to interfere with private control and operation, except in so far as may be necessary to protect the public interest, should be defeated.

The improvement of transportation conditions recently throughout the country is pronounced.



The railroads had on July 1 the largest number of serviceable locomotives available since August, 1920, and the smallest number in need of repair. The roads had stored on this date 2,181 serviceable locomotives in good repaid which were being held in readiness for increased traffic demands.

New Traffic Records

The loading of revenue freight for the month of June averaged more than one million cars a week, and despite this fact there was an actual increase during the month of 31,193 in the number of surplus freight cars. On June 30 the roads had a total of 63,636 surplus freight cars in good repair, and notwithstanding the heavy traffic, said to be the greatest in history for this period of the year, no car shortage existed. These results are encouraging to shippers, and they are evidence of efficient railroad management. They stand out especially strong when it is considered that their accomplishment has been possible despite strikes and other handicaps at a time when business conditions all over the country are showing prosperous tendencies and business enterprises generally are showing increased activities.

Another effort on the part of the carriers which is deemed particularly important, is the attempt of the American Railway Association, through its car service division, to organize regional advisory boards composed entirely of shippers. It is the avowed purposes of the association to bring about the fullest measure of cooperation between the shippers and the railroads of the country, by giving to the shipping public a direct voice in the activities of the car service division on all matters of common interest.

voice in the activities of the car service division on all matters of common interest.

These boards will function along several different lines, according to the plan. They will provide a common meeting ground between shippers, local railroads, and the carriers as a whole; promote a better understanding of local and general transportation requirements; and, assist in anticipating car supply needs. Another important feature is the plan to study production, markets, distribution and trade channels of the commodities local to each district, with a view of effecting improvements in trade practices when related to transportation, and promoting a more even flow and distribution of commodities where practicable. This plan should have the earnest support of every shipper, and its execution, with railroad cooperation, will be productive of excellent results.

New Plans To Be Tried

Other objectives which these boards will seek to reach will be: To promote car and operating efficiency in connection with maximum loading and in the proper handling of cars; to secure rules and regulations which will be better suited to shippers' requirements and to secure the cooperation of shippers in carrying out necessary rules governing car-handling and car-distribution; to acquaint shippers and railroads in each section of the country with the seasonal requirements of their locality in order to promote intelligent cooperation in the handling of equipment between the different districts of the country; and, to adjust informally car difficulties which may arise in each local territory between the carrier and shipper.

When it is understood by shippers that their best interests will be served by working in harmony with the carriers, and that the carriers are ready and willing to cooperate, not merely passively but aggressively, as indicated by the constructive plan now proposed, there will be less clamor for government interference, and radical propaganda against private ownership and management will find no sympathetic ear among shippers.

Shippers of mine products believe that a general reduction in freight rates on ore and coal would result in a considerable increase in the volume of this traffic. Rates on coal to the mines and smelters that are too high cut into mining profits as much as excessive outbound rates on ore. The western carriers already have made some material concessions in rates on low grade ores, but ore producers do not look for any further downward revision in rates in the near future, especially while railroad policies are influenced by the uncertainties of legislation. The mining industry will insist, however, that if the Interstate Commerce Commission undertakes another investigation of the rate situation and finds that revisions downward are advisable, commodities in which the mining and smelting industries are interested should receive no less fair treatment than the products of other industries.

Rates On Basic Commodities

Should the Interstate Commerce Commission again investigate rates, the American Mining Congress proposes to again demand recognition of the principle that rates on basic commodities shall receive first consideration because such commodities constitute the beginnings of all other traffic. Until iron ore moves, there can be no movement of pig iron, steel products or machinery. Until zinc ore moves, there can be no shipments of galvanized iron, zinc roofing or other zinc products. Until copper ore is shipped, products manufactured from copper can not enter into freight traffic. The stimulation of ore traffic by rate reductions, either upon the ore itself or upon commodities used in the production of ore, will stimulate traffic from manufactured and finished products which rightfully take higher rates. This furnishes abundant reason why raw mine products should be given the lowest possible rates—"coaxing rates," which will cause the greatest volume of this class of traffic to move.

Consolidation Not Popular

Consolidations of railroads, as tentatively proposed by the Interstate Commerce Commission, are not meeting with enthusiastic approval. There prevails a general feeling that railroad consolidations will tend to eliminate competition, not only as an element to be considered in rate making but as a controlling factor in the rendition of service. If competition is further reduced, or if it should be eliminated, it is probable that rate-making would be accomplished by arbitrary and analytical methods governed by a rule of thumb.

The effect of the proposed consolidations upon the markets, trade centers and traffic gateways of the country is another feature that can not be contemplated by shippers without serious qualms. If present important markets, trade centers and points of interchange should be crippled or become stagnant because of the centralization of connecting lines and distributing agencies at the great terminals, if rates, following the consolidations, should favor long-haul traffic to and from these terminals, and if industry and traffic should become congested at these centers, the experiment would be enormously costly to the rest of the country.

There is also to be considered the possibility that the allocation of certain territory to particular groups of lines would tend to prevent the construction of new lines in virgin territory, since the group controlling a particular territory might not have to fear competition from lines outside of its territory. Just what results may be anticipated in this direction can not be foreseen. Many objections, which merit serious consideration of shippers, are being raised against the Commission's plan, and, doubtless, any direct step toward execution of the plan will meet with concerted opposition from the shipping public.

Since it has not been shown that any economies in operation would result from consolidation of railroads, or that the cost of transportation would be any less to shippers, or that the scheme would be successful from the standpoint of public interest, or that further legislation is going to help matters in the slightest degree, it is entirely consistent for shippers generally to say, with C. E. Childe, manager of the traffic bureau of the Omaha Chamber of Commerce:

"Let the railroads alone and they will work out their own destinies as individual competitive systems to the far greater advantage of the public than would result from any general scheme of consolidation."

With the railroads sincerely seeking the cooperation of shippers, and at the same time honestly endeavoring to improve their service and enlarge their facilities, and with railroad operations earning increasingly profitable returns, it is entirely proper for shippers to anticipate voluntary action on the part of the carriers, provided they are not further hampered and circumscribed in their activities by legislation, in the matter of readjusting freight rates on a basis that will stimulate mining and other basic industries.

FOREIGN COAL AND OIL DATA IN COMMERCE REPORTS

The Commerce Department through its trade counsels and other foreign representatives of the government secures a vast volume of data valuable to domestic industry. During the past month numerous reports on coal, and petroleum situations in foreign countries as they affect American export trade have appeared in Commerce Reports, the official publication of the Bureau.

The texts of these reports are available to those interested and may be secured upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C.

MINE TAXATION CONFERENCE PROGRAM OUTLINED

Reorganizations, Corporate Distributions, Inventories, Retrospective Appraisals, Depletion Rates, Discovery Values, Mining Profits, Among Subjects To Be Discussed.

THE conference on mine taxation to be held at Milwaukee, Wisconsin, September 24-29, 1923, in conjunction with the 26th Annual Convention of the American Mining Congress, will be featured by discussions of a number of important federal tax questions concerning which much uncertainty prevails both in the Treasury Department and among taxpayers.

With respect to many provisions of the revenue law, no legal opinions or decisions exist by which taxpayers may be guided in the solution of questions which arise in connection with the adjustment of their federal tax returns. The General Tax Committee of the American Mining Congress has approved the policy of making the conference on mine taxation a forum for the discussion of specific questions arising under existing law rather than for the purpose of dealing with taxation theories and general principles, believing that the proceedings of the conference will be of greatest benefit if solutions are found for current problems which are constantly arising in connection with the adjustment of returns of mining enterprises.

The speakers who have been engaged to deliver prepared addresses at the conference are active members and are prominent in many technical and professional societies including the American Bar Association, the National Tax Association, the American Institute of Mining and Metallurgical Engineers, the American Institute of Accountants and the National Association of Cost Accountants.

Paul Armitage, New York, chairman of the American Mining Congress General Tax Committee, will deal with the question: "Is a Uniform Rate per Unit of Extraction a 'Reasonable Allowance for Depletion'?" Mr. Armitage has had occasion to consider every phase of this question, both from technical and practical standpoints, and his views unquestionably will prove to be of great value to delegates who are interested in the matter of depletion.

W. I. Kircaldie, Milwaukee, will discuss the subject of "Retrospective Appraisals"—their use in determining invested capital, depreciation and depletion. Mr. Kircaldie, as manager of the engineering department of the American Appraisal Company, has supervised many appraisals which were made for the purpose of establishing the invested capital, March 1, 1913, value and discovery value in accordance with the requirements of the federal revenue laws. Every war-time mining enterprise has encountered difficulty in the adjustment of values, and many valuations are still in the process of determination. Mr. Kircaldie's address, therefore, will be timely. The American Appraisal Company will have an interesting exhibit at the Exposition of Mines and Mine Equipment.

Arnold R. Baar, Chicago, will discuss "Taxation of Dividends and Other Corporate Distributions" with particular reference to distributions from capital, reserves and unrealized appreciation. Mr. Baar, as a member of the firm of Kixmiller & Baar, has been associated in the authorship and editorship of numerous income tax publications issued in the name of that firm and in the publication of the Commerce Clearing House Tax Services. He will represent the Commerce Clearing House at the conference.

Walter A. Staub, New York, will discuss "Reorganizations." His address doubtless will cover the scope of the provisions of the 1921 revenue law relating to reorganization, merger, consolidation or change in capital stock of corporations, the effect of stock and liquidating dividends, and status of stockholders with respect to their personal taxes, and the effect of a reorganization upon values, depreciation and depletion.

H. B. Fernald, New York, will take up the subject of "Inventories." He will discuss the relations of inventories to federal taxation of mining companies, their effect on taxable income, the valuation bases for (1) materials and supplies to be consumed in operations, and (2) products unfinished or finished and sold or unsold, and their aspects in connection with determination of tax liability. Mr. Fernald is a member of the American Mining Congress General Tax Committee and a director of the National Association of Cost Accountants. He will represent the National Association of Cost Accountants at the conference.

Wade Kurtz, Joplin, Missouri, will address the conference on what constitute "Profits in a Mining Venture." Mr. Kurtz has devoted many years to the study and improvement of accounting methods of mining enterprises in the zinc and lead districts of Kansas, Missouri and Oklahoma. The promoters of many mining enterprises have never enjoyed profits from their ventures due to the fact that the profits earned have been expended in further exploration and development and the enlargement of plant facilities. This was especially true during the war, when the United States Government was constantly urging the enlargement of operations for the purpose of increasing production to the greatest degree possible. The termination of the war left many of the operators helpless, with no hope of ever getting back even the capital originally invested, yet these operators have been forced to draw upon their capital to pay taxes on earnings which never were and never can be enjoyed because they were turned back into the property. The address of Mr. Kurtz, therefore, should be especially interesting to all delegates.

George E. H. Goodner, Washington, D. C., will address the conference on "Discovery Value." He will outline the reasons for recognition of the principle in federal income taxation and will discuss the practical application of the provision to mining undertakings. As no fixed rule can be devised for determining what constitutes a discovery, the provision is one which may be construed either strictly or liberally in each case, according to the policy of the governmental agency charged with its administration. Mr. Goodner is author of the depletion chapters of Prentice-Hall tax service for 1923, and will represent Prentice-Hall at the conference.

Besides these features, a question box, containing questions on subjects discussed last year at Cleveland, Ohio, will be opened, and it is expected that last year's speakers will be present to answer questions pertaining to their papers. Ample time will be allowed for questions and remarks by delegates at each session following the prepared addresses.

Every one interested in mine taxation, whether from the viewpoint of the operator, the engineer, the lawyer or the accountant, will profit by attendance at this meeting. The matters scheduled for discussion are exceedingly important, not merely to particular individuals or companies, but to the mining industry as a whole.

The conference in the past has been regarded as a medium through which the mining industry could express its views as a unit on taxation questions. The presence of a large number of delegates will greatly assist in the formulation of policies to be announced through

resolutions and in giving forceful effect to any solutions or problems which may be proposed.

The conference has grown from year to year until it is now the most important annual national tax conference in the United States, except that held each year by the National Tax Association. The National Tax Association, however, deals with general questions relating to both federal and state taxation, whereas the American Mining Congress conference on mine taxation deals primarily with specific federal tax questions.

NEW POLICIES IN INTERNAL REVENUE ORGANIZATION

Methods and Practices Are Being Changed to Meet Special Conditions—Efficient and Expeditious Handling of Cases Spring From Field Reviews—Results Are Favorable.

CONGESTION and delay in the handling of income tax cases, some of which have been pending since the income tax unit was in its infancy, will be a thing of the past if Commissioner of Internal Revenue Blair and Deputy Commissioner Bright succeed in carrying out new policies they have adopted.

The great expense to which taxpayers have been subjected in connection with adjustment of their returns and claims by reason of repeated journeys, with counsel, to Washington for conferences, has given both the Commissioner and the Deputy Commissioner a great deal of concern. How to reduce the expenses of taxpayers and eliminate unnecessary annoyances in connection with tax cases, has been a burning question.

The problem has not been an easy one to solve. It is not yet certain that a solution has been found which will meet all of the needs of both the service and the taxpayers. But a start had to be made somewhere. So the commissioner created an appeals committee to sit at St. Paul for the purpose of hearing cases of taxpayers located in that district. It seemed desirable to bring justice to taxpayers instead of compelling them to seek justice from distant points at great inconvenience and expense. Therefore the plan of holding hearings on appeals in the field was given a trial.

Results Are Encouraging

The results of the work of the field sub-committee of the Committee on Appeals and Review at St. Paul, which was begun April 20, 1923, have caused the commissioner to continue the plan to hear cases outside of Washington. In addition, he decided to hold hearings at points even more remote than the middle west. After the completion of its docket at St. Paul, the sub-committee was ordered to proceed to Los Angeles to begin a series of hearings on August 1. Later hearings will be conducted at Portland, of cases appealed by residents of Washington, Oregon, Idaho and Wyoming. According to an announcement by the commissioner, all evidence considered in cases heard on appeal must have been perviously submitted to the income tax unit in accordance with the established practice of the Bureau.

Change in Conference Methods

The recent change in conference methods whereby unnecessary conference are practically eliminated through careful study—by bureau men and taxpayers—and preparation of cases in advance of conferences is already operating to the advantage of both parties. Except in a few cases which are surrounded by peculiar circumstances, the work of the income tax unit appears to be proceeding expeditiously under the new rules of practice. The exceptional cases will, of course, have special attention in order that no hardship may result to any taxpayer.

Other features of the work of the income tax unit, both at Washington and in the field, are receiving special consideration. Every possible avenue of relief in the form of changes in methods and practices which will tend to expedite the work, reduce the number of cases in dispute, eliminate some of the taxpayers' expense incident to compliance with the revenue laws, and simplify the work of the unit, is being carefully examined. Undoubtedly further new policies will be announced from time to time as the result of the efforts of the commissioner and other officials of the bureau.

> *"Present procedure in the assessment and collection of income and profits taxes and in the prosecution of claims could be clarified and made less onerous to taxpayers if the necessity for employing expert counsel and for traveling long distances in order to secure a proper adjustment of these matters could be removed by the further decentralization of audits and the establishment of district or state boards of review and appeals."*—Mining Congress Journal, October, 1921.

The steps that are being taken, or which are in contemplation, to improve, simplify and expedite the work of the income tax unit are intended to operate for the benefit primarily of taxpayers. The success of these measures for cleaning up back work and to prevent a recurrence of conditions which have prevailed in the past, will depend, in large part, upon the spirit of cooperation which should be at work in making them effective. It has never been the policy of the commissioner to treat taxpayers as adversaries or to sanction careless or unfair practices in the department which will be detrimental to taxpayers' interests.

The gigantic task of checking 350,000 corporation returns and more than 7,000,000 personal returns annually, involving a diversity of pursuits that are unparalleled in any other country, could not be expeditiously accomplished by the income tax unit, with a new and untried organization, until various plans were put to practical tests, and proper policies, based on such tests, could be formulated and put into effect. No other such task was ever undertaken by any government. No other such organization, requiring the selection of specially trained personnel, with its branches reaching out over 3,617,673 square miles of territory, has been built up so quickly. Therefore, much credit is due to the work of each commissioner who has contributed to the unit's progress.

It has been the policy of all commissioners to have the income tax unit function in the same efficient manner as if the organization were a private enterprise. The same courtesy, accuracy, efficiency and honest production in the work of employes that is required in successful private undertakings, is expected of the personnel of the unit. It is believed that the efforts which are being made to further systematize the work of the unit will reduce the number of delays in settlement to a minimum and will eliminate congestion as soon as old cases have been finally determined.

THE STANDARDIZATION OF MINING AND LOADING EQUIPMENT

A Manufacturer's Statement—Standardization of Sizes, Styles, and Weights Makes For Quantity Production and For Lower Cost and Price

By William Whaley

THE Standardization Movement of the American Mining Congress is a co-ordinated effort to bring forth through discussion the best and most efficient methods and means by which mining is or can be accomplished; and to assimilate and present its findings to the mining fraternity as the proposed "standards" by which to accomplish its work.

In such standardization it is not intended to make hard and fast inflexible rules, but, if possible, to lay down basic principles, and, where the art has advanced sufficiently, to recommend the adoption of certain sizes, weights, etc., of equipment for certain conditions. Thus, for instance, to recommend that a certain gauge of track shall be adopted for certain classes of metal mining, or a certain gauge for coal mines; a certain weight of rail to be used with transportation units of a certain capacity, etc., etc.

The most effective use of mining and loading equipment is dependent upon the standardization of track layout, method of mining, drilling, shooting and preparation of the material to be loaded, and system of transportation or handling of the loaded material.

The manufacturer of loading equipment is vitally concerned in the proper co-ordination and systemization of these allied functions, for loading, cutting, drilling, shooting, track laying, transportation, power, form a chain of operation, and the strength (or efficiency) of each link becomes the efficiency of the chain.

The Factory Program

The subject assigned me is "The Standardization of Mining and Loading Equipment from the Standpoint of the Manufacturer," and I will interpret this as a query—"What is the manufacturer doing, or should he do to standardize?"

"To manufacture" once meant "to make by hand." It now means to make in quantity and by machinery adapted to produce economically, accurately and efficiently. To effect this, the manufacturer must "standardize" his product and methods of production. I will endeavor to explain as briefly as possible how this is done:

1st. When a machine is designed the designer should specify standard materials, commercially obtainable, for instance—if drive chains are used he should specify sizes in regular production by manufacturers specialized in chain manufacture, should designate standard bolts, nuts, cap screws, studs, etc., and, if possible, standard electrical equipment in regular production by electrical manufacturing concerns. The various parts of the machine should be designed in such a way as to insure strength, durability, ease of renewal and economy in production. The machine, when built, is put in use and notes made on its performance and of changes found desirable. This is the experimental or development stage, and may take years.

2nd. After the machine has passed the experimental stage and is ready for regular production (or manufacture), the drawings are made to incorporate all changes and show tolerance and fits, and jigs and fixtures for making up parts so that they will be interchangeable are provided. The parts are now "standardized" and the machines come through in regular sequence and at a much lower cost than would be possible without such standardization of design and manufacture.

Designing the Machine

In designing the standard machine there must be a certain flexibility in the design so that the machine can readily be adapted to many different conditions—for instance, the standard machine should be capable of adjustment to suit track gauge, car dimensions and power available, with as few changes as possible. There must also be a certain flexibility in design of parts of the machine so that when experience indicates desirability of change or improvement, such changes can be made without destroying interchangeability of parts.

It will be seen from the above that standardization is essential to the manufacturer, enabling him to furnish a better machine, more satisfactory to the purchaser, and at a lower price than would otherwise be possible.

It is the duty of the manufacturer to standardize his machine—First: Because he is thereby enabled to build a better machine at a lower price. Second: Because thereby mines using a number of his machines need carry only a small stock of spares, for such spares will fit any of the machines. Third: The manufacturer is enabled through standardization to supply from stock repair parts as needed.

Is it not also the duty of the mine operator to "standardize" his operation in such a way as to secure best results from his mining and loading equipment, and thus to reduce his mining cost?

Standardization of methods of operation will enable the mine operator to secure better, more uniform and consistent results with lower mining costs. We see, therefore, that standardization in this instance really means the selection of methods and equipment found best adapted, and the adoption of same as standard practice, bearing in mind that such standardization should be flexible enough to accommodate improvements as they develop.

DRILLING MACHINES AND DRILL STEEL

By Ralph A. Scott

AFTER the experience of the war had shown the urgent need of standardization in many industries, a general movement was developed to that end, and in a comparatively short time an astonishing amount of good was accomplished. The Federal Government established a Specifications Board, whose purpose it was to bring the Government specifications into line with the best commercial practice. In this connection, it is interesting to note that the plan was to bring the specifications into conformance with the best commercial practice—this is worth repeating, as it will be shown later that the reverse of this plan was at first put up to the manufacturers of rock drills when they were asked to shape their products to conform with varied specifications coming from all points of the compass.

The request of standardization in the mining industry came somewhat later than in many others, and perhaps for the reason that the increased demand for coal and metals immediately following the war made it inadvisable to undertake any changes that would in any way interfere with production at that time. When attention was finally turned to drilling machines and drill steel, the general assumption was that rock drills were badly in need of being standardized, but a thorough analysis of the situation soon developed the fact that this would be practicable only to a very limited extent.

Two years ago a questionnaire was sent out by the chairman of our com-

mittee, and it required only a glance at the summary of replies to indicate the very wide divergence of practice in the mines of representative companies. Since that time some progress toward standardization of practice has followed the good efforts of the American Mining Congress. It has been shown that if users of drilling machines could get together and agree on the section of steel, size of drill hole, length of guide shell, and various other factors, it would be possible for the manufacturers to greatly reduce the amount of special machining equipment required, to say nothing of the reduction in stocks of parts. Conditions in various lodes are so different, however, that it is quite out of the question to adopt any hard and fast set of specifications, and until such time as those who are using rock drills can take some definite steps to standardize practice on their own properties, there is not much hope that further progress will be possible. It has been stated in this connection by a prominent mine operator, who is a member of our committee, that "standardization, like charity, begins at home, and, like charity, it is generally harder to find there than anywhere else."

Designing Hampered

From the drill manufacturer's point of view, a limited amount of standardization is quite desirable, but if it is carried beyond this point, new design may be seriously hampered. In many cases, it is only the refinement of detail within a drill which determines superiority, and, when the dimensions of such parts as piston hammers, valves, cylinders, etc., must needs be controlled within limits of one one-thousandth of an inch, it is out of the question to apply any definite specifications governing these dimensions. If standardization means to protect present standards from changes which are not in the direction of refinement, that is exactly what we are striving for. Many good suggestions have been submitted by those having to do with the operation of rock drills, but advantage cannot always be taken of these, for the very reason that too many changes would defeat this fundamental purpose of standardization.

Existing Standards

We have already agreed on the size and shape of cone for the guide shell, so that one make of drill can be used with another mounting. The same has been done regarding air hose couplings and drill steel shanks, but it has not been found that all the mine operators have adopted even the standard hose couplings, for the reason that a mine already equipped with one style is reluctant to discard these and buy others simply to conform to what is standard practice, even admitting the desirability of having one accepted form of coupling. Standardization in the sense in which we are discussing it, is predicated upon a compromise or give and take basis, as between the principal drill manufacturers. They can get together at some sacrifice in their respective designs, and agree to standardization on certain specifications, but this is only half the battle. It then remains to get operators to adopt the new and discontinue calling for the old designs.

Designing Rock Drills

In the design of rock drills, it is obvious that the manufacturer is vitally concerned in limiting the number of models, but here again the various conditions that drills are called upon to meet have made it difficult for the operators to agree upon their requirements. The demand for new types of drills comes to us from the field—more drilling speed with less weight is emphasized, and the endeavor to meet customers' views is what makes the manufacturer's position difficult if he is circumscribed by predetermined specifications in bringing out a new drill. Through the elimination of the unfit in experimental machines, as well as in current models, there is constantly going on what may be said to be an automatic standardization in general drill design, and objectionable features are, to a large extent, excluded. This might be termed self-standardization. The later types of drilling machines designed for higher drilling capacity necessarily impose more severe duty on the drill steel, and it seems likely that their introduction may preclude the use of the lighter sections of drill steel, particularly where scant attention is given to too long running of drill bits after they have become dulled.

Standards for Drill Steel

As regards the standardization of drill steel, the drill manufacturer is keenly interested in seeing the number of sizes and sections now in more or less common use materially reduced. At the present time, there are in excess of fifteen different shapes and sizes of chucks required to be carried to take care of the three more common types of drills, viz., drifters, stopers and jackhammer type machines. It is, therefore, obvious that we have an enormous investment in equipment and stocks, which could be at least cut in half if usage were limited through standardization to two sizes of steel, and it is felt that this ought to be possible of accomplishment by agreement between the users of steel. The Copper Queen Company has standardized on 1-inch round steel with lugs, for all types of drills, and the success of their experience is set forth in an article written by Arthur Notman in the June 2 issue of the Engineering and Mining Journal Press. It was found that they had to improve their smith shop practice, and that the heat treatment, gauge change, size of bit, length of run per steel and other factors had to be first determined and then definitely controlled before dependable results could be reached. Proper supervision of practice, both in the steel sharpening shop and underground, is indispensable to good results, and here the fallacy of running dulled bits cannot be too forcibly stressed, not only from the standpoint of excessive drill steel breakage, but in its relation to high maintenance of drilling machines as well. It is quite useless to undertake standardization of drill steel and limitation to one or two sizes, particularly the smaller sections, without making a determined effort and preparing to carry out rigid instructions that dulled steel be discarded.

Few Sizes Needed

With drill steel, the fewer sizes in use the better. This is axiomatic. The 1-inch round lugged steel has been found to fill all requirements at the Copper Queen, and 1-inch quarter octagon plain-shanked steel is coming into more general use, displacing some of the heavier sections in other mines, notably the Anaconda Copper Mining Company properties in Butte and the Homestake Gold Mining Company in South Dakota. The use of plain-shanked steel, however, calls for tappet or anvil-block construction, and here again the drill manufacturer must be prepared to supply special parts. If it were possible for all drill users to limit themselves to 1-inch round lugged steel, the manufacturer of drills would be able to eliminate much waste, but, up to this time, the fact that very few companies have been able to adopt this steel makes it necessary that chucks to fit it must still be regarded as special equipment, the net result so far being that there is just one more chuck size to be considered in making all the types of drilling machines. It is hoped, however, that a wider application of 1-inch round lugged steel can soon be under way, so as to determine its general adaptability.

Keep Incentive Alive

In conclusion, there is an evident desire on the part of the manufacturers to approximate standardization, if in so doing individual incentive to design a superior article is not destroyed. So far there has been nothing said on the subject of equipment sold in foreign fields, from which source a considerable portion of the total business normally comes. It goes without saying that there must be a proper balancing of the requirements from so-called domestic fields (Canada, U. S. and Mexico), with

those coming from foreign mining districts, to insure overall economy, and an economic analysis of the situation as regards standardization from the drill manufacturer's point of view, must of necessity be worldwide in its scope. It is manifest that we must first decide what savings can be effected domestically before any attempt is made to consider foreign requirements, but this phase of the problem is one of which the drill manufacturers must ever be mindful in considering the broad aspects of standardization.

Underground Haulage

I DOUBT very much the practicability of standardizing underground haulage equipment solely on the factors given by Mr. DeCamp. While it is true that in most cases the load itself should be increased proportionately with the tonnage handled and distance handled, other factors may enter to make a modification of this rule advisable.

For instance, a large property mining a substantial tonnage from a number of veins might have to be equipped differently than a deposit where the ore is concentrated in one area, even though the outputs were about the same. The system of mining used and the size of the ore broken also affect the size and type of cars used.

To be more concrete, I will give our own conditions, which fall under case V in Mr. DeCamp's letter. The mineralized area is a very large one, containing two large veins and a great number of small ones, which, in the aggregate, will constitute important producers. Long cross-cuts will be required to reach some of the outlying veins. The cost of development work will always be an important part of the total mining cost. Preparations are being made to mine 2,000 tons per day. The bulk of this tonnage will be mined by a caving system and the average haul for this ore will be about 1,000 feet. If consideration had been given to tramming costs only, a 24-inch gauge track and 3½-ton gable bottom or flat bottom cars unloaded in a rotary tipple would have been selected. As the drifts in the vein are timbered and will take weight as the ore is caved, it is desirable of course to keep them as small as possible to save timber and minimize subsequent costs of maintenance. Also short turnouts are advisable for the same reason. We first considered using a 20-inch gauge track and 33-cubic-foot rocker-dump cars on the mining levels and larger cars on the main haulage levels. The latter, being connected to the general hoisting shaft by fairly long cross-cuts, are more suitable for developing the other veins on the property than the mining levels which are not connected to the main shaft. By using smaller cars and a narrow track, the cost of development work can be reduced. Taking into consideration all of the foregoing factors, it was decided, whether rightfully or not, to standardize entirely on a 20-inch gauge track, 25-pound rail and 33-cubic-foot rocker-bottom cars and storage battery locomotives. In this connection it should be stated that the broken ore is soft and carries a large percentage of fines. The wear on the small cars should not be heavy. If the ore bodies were hard and broken in large chunks, we would probably use larger and consequently more rugged cars. If the ore bodies were concentrated in small area, we certainly would do so.

Disadvantages Offset

While we have made some sacrifice in future tramming costs by selecting fairly small equipment for such a relatively large tonnage, greater flexibility is gained, development and timbering costs will be lower and equipment charges for rails (no small item in a property covering a large, mineralized area) will be less.

A 20-inch gauge is used throughout Mexico, and is, in my mind, preferable to the 18-inch gauge. In developing properties of this type, I have found it advisable not to give any grade to the tracks in opening up the first level. It often becomes advisable to sink a new hoisting shaft after the ore bodies have been thoroughly investigated at this horizon. Where stopes have to be filled with waste, a level track eliminates the possibility of having to haul waste upgrade. The additional cost for increased power consumption in a level track is not important unless power costs are very high.

Mr. DeCamp has allowed a great deal of latitude in tonnages and tramming distances under cases 5 and 6. The equipment best suited for tramming 400 tons a day a distance of 2,000 feet would not be suitable for moving 2,000 tons a distance of 15,000 feet.

As our glory-hole operations here fall under Case 6, I will describe the equipment selected, as it has given us entire satisfaction. About 4,000 tons of ore, maximum size 30-inch, is trammed in three shifts an average distance of 2,000 feet through a 10x10-inch adit. The gauge of the track is 36-inch, rails 50-inch and grade 4 per cent in favor of the load. The cars have a capacity of 275 cubic feet, are of the box type and are unloaded in one car rotary dumper. Swivel couplings are used to avoid having to disengage cars when they are dumped. The cars are very rugged, have draw-bar springs acting in tension and compression and pedestal springs. Hyatt roller bearings are used. Ten cars are hauled by an 8-ton trolley-type locomotive. Repair costs are remarkably low and I doubt whether any reduction in tramming costs could be made by using standard-gauge equipment recommended by Mr. DeCamp. Broad gauge seems only advisable underground where large tonnages are being hauled from a central point a long distance to a crushing plant.

The Important Factors

While standard sizes and types of cars may be set, based upon factors of tonnage, tramming distance and character of ore to apply to maybe the majority of mines, others should take into consideration special load conditions affecting the choice of equipment to be used.

We have received in the past six months proposals from car manufacturers on a great number of cars of different types and capacities; also blueprints from different mining companies of cars used at their properties. Cars of the same type and about the same capacity differ in different mines as far as details of construction are concerned. This variation in design is particularly noticeable in the construction of the trucks, design of car wheels and application of the roller bearings. I have yet to see a perfectly satisfactory car wheel. The end thrust produced when the car goes around the curve is not taken care of properly in any design that has come to our attention.

A standard design for different types of cars of various capacities would be of great assistance to mining companies in selecting a suitable mine car. If these designs were used instead of a great variety which have no particular merit, the car manufacturers would be able to build more cheaply than at present, where every order requires certain new patterns and templates.

(*Continued on page* 285)

A PERSONAL EXPERIENCE IN INDUSTRIAL RELATIONS

A Crusader, Employe Under Feudalism, a Mine Manager With Ideals and An Operator During a War Comes to Believe in Cooperation Based on Education

By Josiah Keely

[*General Manager of the Cabin Creek Consolidated Coal Co., Kayford, W. Va.*]

Imagine the experience of the writer—a school teacher in a mining town; an officer of a coal company with theories and then as an operator forced to fight an industrial war. Imagine the disillusionment when every ideal is swept away by war and intrigue. But, instead of bitterness, there comes a calm fundamental philosophy which says: "Our national hope is in education." The article presents a picture of industry and of an American at work.

UNTIL seventeen years ago, I had a purely academic interest in Industrial Cooperation. I had charge of a State Prep school in the heart of this coal region, and formed my ideas on the possibility of industrial cooperation from hearing the sons and daughters of miners and mine bosses arguing the questions then causing strife in the coal fields. After ten years of studying this subject from without, I went and joined myself to a coal company as a billing clerk in a mine office and spent seven years under non-union conditions. I think my first recognition by the management was due to whipping the town bully and then making friends with him. That sounds like story-book stuff, but I was still a school teacher rather than a coal operator, and a football player, so there was nothing particularly heroic about it.

I can not say that I was impressed with the industrial relations existing in that region. I saw some rather raw stuff "pulled" by various companies in order to crush any agitation for a miners' union. In fact, I spent most of my seven years in an atmosphere charged with politics and anti-union activity. I would hesitate to recount some of the lawless things we did to meet the lawlessness of the union, but I still feel, in the light of subsequent experience, that we were probably justified in our feelings toward the union.

Lack of Discipline

The company guards handled any cases that threatened to be a menace to the camps. The only sin a miner could commit was the crime of disloyalty. Disloyalty consisted of two things: union talk and refusal to vote right. In order to foster cooperation, we overlooked considerable laxness in discipline about election time, and had our own beer agents, who were instructed as to times of delivery. The system was quite feudal.

Having come from school work, I accepted conditions in this coal field as the normal growth of industrialism, recognizing the rights of the investors to combat sinister influences in the only way to get results. I became a mine superintendent and was sent to another state as a district superintendent, where I found about the same system, only better in hand. In the meantime, I was reading of the fight against the union on Cabin Creek—the murders, the machine guns, and the scabs, and the beating-up of "transportation." Even in our non-union field I had found that laborers brought in on transportation were looked on practically as strike-breakers, and were slow to be accepted in good standing by the older miners. One spring I had a part in looking after and placing transportation miners, and, of the two thousand brought in between January and June, we had about two hundred left in June. I knew that even the mine bosses and superintendents looked on them with some contempt and went to extreme measures to fill up with local men so as not to have a bunch of transportation. I think I realized at the time that the system was toppling.

My opportunity for the management of mines on Cabin Creek was unexpected and unsought. The union had won out in the big strike and the old management did not wish to operate under union conditions. I accepted partly because it was a promotion, partly because I was born and raised in this part of the state, and partly because I wanted to see what I could do with employes that had gained the reputation for lawlessness then current in the newspapers.

There was the expected tenseness growing out of an eighteen months' battle. I was waited on by committees that presented ultimatums rather than requests, and every miner seemed truculent and hunting for trouble. While the new contract was being adjusted, local strikes continued. Besides the friction with the company, more men were cut, shot and maimed among themselves than I had seen in the non-union fields all the seven years I was there.

Trying All Experiments

As my ten years of school work had been done among the children of these Kanawha and Cabin Creek miners, I found points of contact, and made friends. I had dreams of a closer cooperation than had been possible under the other system. As pistol licenses expired, I refused to have them renewed, and we tore down the machine-gun towers. I entered into the church and Sunday-school work. The pastor was a company-paid fossil, and I insisted on the people choosing

themselves a man to their own liking, concluding that no worse "disloyalty" to the company could be preached from the pulpit than I had seen every day since I had come on the job. I do not think the old preacher was insisted on by the company, and I know that my new proposition did not arouse any enthusiasm, but I was fairly popular, in a way, and probably considered lacking in backbone.

Of the years from 1914 to 1917, little need be said, only that I was watching with a good deal of interest the development of the union under my wholehearted cooperation. Their victory had been accepted as a fact, their contract as binding, and I had no intention of treating the organization as anything other than it purported to be—a union for collective bargaining and for the protection of the rights of workmen. It seemed as if our relationship was all cut out for us, and that all that was necessary for real industrial cooperation was good faith on both sides. Our local disputes and little inconsistencies could be accounted for by the newness of the thing and the zeal of men who had not before had a voice in the daily struggle, nor been trained in diplomacy. I was beginning to believe that a union might not be what the older men in the business accused it of. Generally, our discipline was better than it appeared in the non-union fields, only for the public damnation of the company as a sort of reminder of the new freedom.

The Beginning of Doubt

The first thing that disturbed me was that the miners' officials would not decide fairly when cases arose calling for decisions adverse to the miners. I was sometimes able to settle strikes better myself than by calling in Board Members, who seemed to make it a point to back up the strikers regardless of the position they took. One instance was at our Holly mine, where our men came out because we hired as weigh-boss a man who had been a scab during the strike. This case finally came up to the District President, who ruled that he could not require his men to work under a man who had formerly opposed them in the strike. I pointed out that we had all formerly opposed each other, but under the conditions of the strike settlement we had taken back all the "red-necks" and they were supposed to forget the scabs. Also, it was provided that the company weigh-boss should not be eligible for union membership. The union, of course, had their check-weighman, anyway. After the President had left on the train, I called in the men and proposed that they work a week under the old arrangement and I would come again at the end of that time and see how they felt about it. If they still felt aggrieved, I would make them another proposition. In another week they seemed to have forgotten about it.

For ten years the company had had a rule that no whips should be used in the mines by the mule drivers. They construed this as a grievance, and one morning all the drivers appeared at the stable with new whips. They were not allowed to take the mules out. The union backed them, but, after a week, the loaders began offering to drive, and the strike fell through.

Pay For Entry Coal

Our differential between room and entry coal was five cents per ton in favor of entries. Still this did not seem to encourage entry driving. At one mine, a foreman, in order to get by with his work in the easiest way, allowed an unauthorized yardage bonus on entry driving, covering it up on his time sheets as slate work. After some months, the slate work was found to be out of line in cost and a check made, with the result that the fraudulent bonus was found and the foreman discharged. All amounts promised by the foreman were paid, but it was announced that in future the work would be on the agreed scale. A strike was called, and, all in good time, came up to the President of the district. The company held that the contract was for the purpose of stabilizing the rates and working conditions during the life of the contract, and that it was my duty under the contract to see to it that there were no changes up or down. Also, that the entry workers in this mine were violating the principles of unionism by insisting on an advantage over their brothers in adjoining mines.

One plant—a coal mine—is employed alike to make a living for an operator and a miner. Their attitude toward each other causes them to cripple the plant so that it can serve neither to the full. The author suggests that through the right kind of cooperation—yet to be developed—both can get peace and a better living. He says that the present is a period of industrial reconstruction in which various ideas are struggling for supremacy. He has no panacea—only patience and faith.

The President held that the conditions in this mine warranted the increase, that the foreman was the official agent of the company, and that as soon as the advance was paid the rate became established, regardless of whether the management knew it or not. It was pointed out that the foreman had no authority to change the rate, and that he had used fraud to conceal it. One of the miners, thinking to strengthen the grievance, volunteered the information that we still owed him a sum, because the foreman had been watched so closely by the superintendent that he had not got a chance to turn it in. I stated that in such a case the miner would be paid up to the time the foreman was discharged, although he was a party to the fraud, but that the scale would be adhered to in the future.

The union still contended for the fraudulent rate at this mine, and threatened to call out the other mines. We had to meet this by announcing that there would be no more entry driving in this mine, a right too well established to be questioned, but it was a year before we could work entries on the proper rate, and the superintendent finally had to be changed. The new superintendent slipped in some new men who worked the entries a few days before it was discovered. The case was immediately reopened, but we held that, according to the old ruling, we had reestablished the rate, even though it had been accomplished by slipping in some men who did not know of the old controversy. We got by with it, but the men who had started the entries were in bad standing with the union.

The Rise of Radicalism

During the war period the contract was thrown to the winds by advances in wages passed on from the Central Competitive Field. There must have been several general strikes to establish these demands made on war needs, and the operators gave in partly to be patriotic and partly because the prices would stand it, although contracts were violated by the union. With "Win the War," "the New Freedom," "Make the World Safe for Democracy," mingled with "Get It While the Getting is Good," a new element was injected into industrial relations—the Soviet idea, and the Dictatorship of the Proletariat.

It is rather difficult to understand how anything so dangerous and un-American could become a menace right around the capital of the State, but the indifference of the public because of local business interests and local politics gave the thing a wonderful grip; the union had much money and many votes, so petty business men maintained a conspiracy of silence, and the civil authorities played politics.

Lawlessness went unindicted and unpunished. The local unions became organizations for the protection of criminals. We had eight murders in a radius of four miles, and little notice was taken of them. One of our superintendents and myself broke up twenty moonshine stills in one season, most of them in worked-out portions of the mines. The discharge of a miner for any cause whatsoever brought on a strike.

We had a little park of grass in front

of one of the stores which we tried to keep green and fresh, and even the men spent their evenings kicking the palings off and bating the children into racing over it. Any attempt of the company to enforce neatness and sanitation was met as an encroachment upon the new freedom. In six months the company bought over five thousand window lights, three hundred tenement doors and tons of fire grates. Pumps were twisted off and wells choked up and hydrants left running. The churches and Sunday schools were poorly attended, and the interruption of divine service by young hoodlums was a weekly occurence. One night a revival service was in progress, and a drunken miner came in with a cigarette in his mouth and a gun in his hand and strolled up to the "mourners' bench" to look them over. One of our superintendents happened to be present and a warrant was issued for the offender, but at the trial the minister testified that he would not consider driving the "mourners" away an interruption of divine service.

The Union Participation

Every local had its committee for beating up men who were inclined to protest against union lawlessness. The public schools, fortunately, were still looked on as belonging to the proletariat, and, although the company was furnishing nine teacherages, supplementing salaries of teachers, extending school terms, and paying half the salary of a special supervisor, the schools continued to do good work. The year before, this supervisor had brought up twenty truancy cases before the local justice and lost only one. The next year she went before the locals and asked them to appoint committees for seeing that the children were in school so that she would not have to fine their parents. The response was all that could be desired.

In the summer of 1921, just as there seemed to be some reaction from all this radicalism, rumors were spread that there was to be an armed march to Logan and Mingo counties to overthrow the local authorities and establish the union by force. The union was already the local government in Kanawha. About ten thousand miners gathered, and the next ten days is a matter of State history. Our stores were looted and our homes invaded. There was a semblance of military discipline in all this, and, for some reason, my own home was not entered, though I was forced by an armed mob to open up our Kayford store and offices to be searched for arms and ammunition. I talked with the leader, whom I knew, but the others were masked. He told me that he was sorry to make this show of force among operators who were recognizing the union, but it was a time of war and they expected to pay for everything later.

The Stolen Watch

A watch had been stolen from one of the rooms by one of the searchers, and the owner, our chemist, asked, "How about pay for my watch?" The leader immediately turned to his men and ordered them to line up for search. The watch was produced from somewhere down the line and passed up and turned over to the leader, who returned it to the owner.

This gentlemanly bandit stuff was imitated in several instances by paying for cigarettes and other small articles, while others were looting hundreds of dollars' worth of flash lights, shoes, automobile supplies, etc.

They had their court-martials, executions, and trained nurses, only the nurses had "U. M. W. of A." on their caps instead of red crosses.

This seems to have been the beginning of the end, for the slump came in the coal industry, and some of the better men began to realize what they had done. The State had passed a law providing for a Constabulary, and these police began to act. The union miners on Cabin Creek openly boasted that they would kill the first one that came on Cabin Creek, and they nearly succeeded, as two were shot down from ambush right in the start, one of whom is an invalid for life, but others were sent in and arrests made, but no convictions were made.

Justice Is Handicapped

I wrote up what had happened during the march in Kayford, with names of five or six of the raiders who were recognized and the names of our officials who had recognized them, sending a copy to the prosecuting attorney and to the Governor, but, when the grand jury met I was not summoned. I went anyway, and was told that an indictment was made, but that is the last I have ever heard of it. That is now two years ago. Logan County is still carrying on the prosecutions for murder, treason, and conspiracy, and I have testified in their cases, but Kanawha is inactive. A former prosecuting attorney of Kanawha is helping the miners in their defense.

April 1, 1922, was our time to make contracts with the United Mine Workers. As you know, a nationwide strike was called from the Central Fields, and we could not have got a contract if we had wanted it, but some of us had had enough of closed shop, and offered to open our mines open-shop and no check-off. We started at first without asking for State police, but, after the usual beatings and threats, we asked for protection and have been working in this way ever since. As the local courts and justices still favored the miners' union, we were six or eight months getting the last strikers out of our houses, not making a single conviction, but carrying every case through a series of appeals and compromises.

The Tent Colony

The union seems to have made a condition of continued support of these strikers that they dwell in tents as near the mines as any ground can be rented, so we still have tents all over Cabin Creek in order to impress incoming workmen with the idea that there is a strike on. The majority of our men are the ones who were with us during the march and got enough of the dictatorship of the proletariat. Some of them are real heroes, as was shown by the chances they took when we first started up our mines. Open shop really means non-union, as no union man is permitted to work in our mines and keep his membership in the union. That is, the United Mine Workers do not permit it, and, if the present sentiment keeps up, what started out as on open-shop proposition will grow of its own accord into a non-union field.

Under these new conditions, it is really surprising what a change has taken place in some of the men who formerly caused trouble. This year is the first in ten that I have had any satisfaction in industrial relations, or, in fact, in seventeen, for in the non-union field we were always afraid the union would get in on us. Just at present our men do not want the union. I have heard this said in other non-union fields, but always have doubted it a little in my heart, but our men call themselves "scabs" with what appears almost pride. We are doing nothing to keep agitators, or union men, off the job—they are simply not welcome. One of our superintendents had to interfere when he found that his men were planning to stop a truck of tent dwellers who were coming through on "inspection."

In some cases, part of a family are living in tents and the rest working. When an occasional man deserts from the tents and is hired at the mines, there is a lot of good-natured raillery. For instance, one young man who had been striking over a year was hired the other day, and worked so hard that he became over-heated and vomited. In the heartless way men have when they want to be friendly, his fellow workmen gathered around him, and, finding nothing serious the matter, told him that it was just the old union grub he had been eating, and that he would be all right when he got it out of his system. It was said and taken in good part.

The Hopeful View

The point I am trying to get at is, if we could keep the present sentiment and feeling, we might, with fair dealing and close contact, build up some system of

(*Concluded on page* 284)

MECHANICAL COAL LOADERS FROM THE ENGINEER'S VIEWPOINT

Before Machines Can Be Used, the Layout of the Mines Must Be Adjusted As To Room and Pillar Conditions, Track and Cars Delivery and General Adaptability of the Machine to Conditions

By NEWELL D. ALFORD
Pittsburgh, Pennsylvania

MECHANICAL loaders in coal mines need study and application—not standardization.

There are several good loading machines on the market that are doing work where conditions are no better than the average, but no matter how good one is, it will not be a success unless kept running.

Continuous performance will come through most careful study of a machine's ability before installation, determining proper track arrangement behind the machine to speed the placing of cars and planning the most economical arrangement, in developed mines, for adapting the loading machine to conditions where the mining layout is established. Even in such mines, as much license as possible should be used in adapting both face and pillar workings to the convenience of the machine and its most efficient track plans. With the layout requirements of the desired machine at hand, development plans for a new property should be able to get higher efficiency than where the flexibility is limited in mines that have been producing.

The study before buying should include as many inspections of operating machines as possible, both of the same and different makes. Mine layouts for hand loading are not best suited to machine loading. All the practical ideas on methods of driving places and fixing track that one can get should be collected before the machine is installed. This inspection cost is money well spent, because of the advisability of beginning where others have left off.

In judging the efficiency of mine car handling, it must be remembered that even a hand loader can, in many cases, double his capacity with an adequate supply of cars.

A mechanical loading inspection report should include:

1. Man hours per ton of coal loaded each for the machine operation and car handling.
2. A log of the machine's time, showing work and delays.
3. Relative location of the places worked by one unit.
4. Scheme of car handling.
5. Actual repair costs.

Better permanent efficiency is secured by using a carefully organized crew when installing the machine. Eliminating delays is the first task and more men will be needed at the beginning to give a machine its required service than after the operators and car handlers are familiar with their duties. Even then, frequent mechanical inspection is essential to the anticipation of the system's needs and the consequent efficiency of the machine.

It is a great mistake to put the responsibility of installation on a mine foreman. He already has sufficient trouble, and in such a case either his general supervising work or the initial success of the loading machine will suffer. A crew or single operator for a machine need not have mining experience, and in the installation stage particularly it is apt to work out better if the operator has not been a loader. A special man's duty should be to see that the machine gets what it needs when it needs it.

Any mine official will sense the advantages of the mechanical loader; but, if he lets someone else do the pioneering, adequate development will be lost to the industry for a long time to come. The maker rightly refuses to guarantee a capacity with no assurance of the degree of cooperation his installation will receive. Unless the buyer is unusually well organized to improve a car handling and mining scheme, much of the possible efficiency in mechanical loading is lost and the development of the principle is retarded.

More quickly will the industry reap the benefit within its reach when the manufacturer feels free to offer adequate service for application with his machine; not in the sense of a guarantee, but real cooperation, through experienced mining men for this purpose. The first cost will be higher, but it will pay generous earnings to the buyer.

The greatest difficulty lies not with any machine, but its car supply. The efficiency will be remarkable when application allows the greatest possible performance.

Experience has shown, where machines have been used the longest, that they are much more productive on pillars than on solid work and that the costs are more than correspondingly lower because of greater concentration with decidedly less work on slate moving, timbering and track laying.

While it is undoubtedly true that the best results can be obtained where the details are worked out for the advantage of the loader, it is also true that the mechanical loader can be used in most conditions with much lower costs than with hand loading under present wage conditions, providing the machine gets a square deal.

A PERSONAL EXPERIENCE IN INDUSTRIAL RELATIONS

(*Continued from page* 283)

industrial cooperation. It is true that we have not built back a full organization, but, with little more than half the population, our Sunday schools and churches have twice the attendance; the secret orders are beginning to function again; the Y. M. C. A. has doubled its activities in the way of promoting wild life leagues, automobile clubs and competitive games, gardens, and the usual community activities. I seem to have done more by putting the union out of the business than I could in all the other years of trying to cooperate with them, and I did try.

I am not sanguine enough to believe this a permanent condition, nor very stable. It is perhaps largely reaction from the terrorism which was constantly growing worse until the armed march brought men to their senses. I believe it may be a long time before it becomes as bad as it was, however. Naturally, the United Mine Workers will never allow us to go along in this way longer than is necessary to recuperate from the financial loss due to the march and the injunctions and trials growing out of it, and the adverse sentiment created because of it. It is probably an armistice at best. We will, of course, make the most of it while it lasts, but I am confident that if we attempted to organize our men into some sort of cooperative body, independent of the union, it would make it easier for the United Mine Workers to capture, for they would start their attack directly on those at the head of it.

THE COMPANY UNION

One time, years ago, we broke loose from the United Mine Workers and formed a union of our own men. In a

little over a month, our president was president of the District for the United Mine Workers, so this time we are not organizing for cooperation, but keeping in close contact with men of good influence who will keep us advised as to any injustices the men may be complaining of.

If the Mine Workers were what they ought to be, they would be the most powerful organization in the world for industrial peace. We could go to them direct to put over industrial programs of cooperation, but for years they seem to have preferred to keep their membership on a raw meat diet, and they frankly state that they are an organization of one object, to raise wages and dominate industry. Their militancy does not allow any deviation from the main point, and peace and good will do not fit into their program.

THE UNION'S FUTURE

As I see it, the United Mine Workers must be harnessed for industrial cooperation or else exterminated; and one is about as easy as the other. Some of our operators seem to think that they have industrial peace when they can "sweeten" the union officials, and I regret to say that up to date this seems the most successful way. I will not deny that I have resorted to this indirectly myself in times past, but there are a few of the old guard who have about arrived at the fervor of the immortal Pinkney, "Millions for defense, etc."

Any right-thinking man must face the problem in the light of the facts: Labor unions up to date have not favored any kind of industrial cooperation, and have wholly repudiated any organization, or movement, among their membership and their employers looking toward local shop cooperation, or of man-to-man dealing with the employer. Even the standard secret orders have suffered to such an extent in the mining camps that any good that might come through them is today nullified. The union dominated them to such an extent in Kayford that I am told that their treasuries were robbed for the armed march, and their officers were the officers of the Mine Workers.

The first thing is the enforcement of law and order.

[illegible]ould follow this by exterminating the union where it opposes cooperation and using it where it falls in with the plans for industrial peace.

The fruits of peace are the normal functioning of community activities and uninterrupted production.

I am not in favor of private philanthrophy, or the so-called welfare work planned and financed by corporations.

As proved during our worst condition of radicalism, the public school was the one thing left that the people claimed as their own, and contributions in the form of taxes are never resented. Direct donations pass with little criticism.

UNDERGROUND HAULAGE

(*Concluded from page* 280)

To work out in detail a set of standard cars would require the united and painstaking efforts of a number of very competent men, thoroughly versed in the subject. It does not seem practicable.

Considerable assistance, however, might be rendered by having mining companies submit blue-prints of the cars used at their properties, from which would be selected examples of good design for different types.

A discussion of the relative merits and disadvantages of the different types of cars might prove helpful.

It is surprising how often draw-bar springs are omitted in motor-haulage equipment; also pedestal springs in medium size equipment, that is, cars having a capacity of from 2½ to 3 tons; also cast-iron is often used where it is cheaper to use cast-steel, and vice versa.

T. C. BAKER,
Assistant General Manager,
The Mexican Corporation, S. A.

REHEARING ON SILVER DENIED

(*Concluded from page* 273)

it is always impossible to earmark the silver bullion in the several accounts or to identify any coins as having been made from a particular lot of silver.

"In general, I notice that your letter deals solely with the technical points relating to the melting of standard silver dollars and the coinage of bullion into subsidiary silver. These points are covered by the Comptroller-General's decision, and it is unnecessary further to discuss them. I do not find it anywhere disputed that the action which the Treasury has taken in respect to the reversal of the allocations for subsidiary coinage, and the subsequent recoinage of this silver into standard silver dollars, have merely restored the situation to what it would have been had the allocations never been made. This fulfills the primary purpose of the act, which was to relieve an emergency and restore the silver currency to what it was when the act was passed, it has been done without purchasing silver under the act at the price of $1 per ounce by transferring back to the standard silver dollar account an amount of silver carried in the subsidiary silver bullion account which had been lying in the mints at all times since the original allocations were made. To do otherwise, and follow the course which you recommend, would mean purchasing over 10,000,000 ounces of unnecessary silver at the artificial price of $1 per ounce, at a loss of over 35 cents an ounce as compared with the ordinary market price, and carrying an equivalent amount of silver as a dead asset in the Treasury at a heavy loss for interest and other carrying charges. The Treasury's action in adjusting the accounts of the mints has thus saved the people of the United States at least $5,000,000, that would otherwise have gone to subsidize the silver industry. The action taken was clearly in the public interest, and, though apparently not acceptable to the silver interests of Nevada, should commend itself, I believe, to the Commission of Gold and Silver Inquiry, a committee of the Senate of the United States which was appointed to serve the interests of the people as a whole rather than the special interests of a single class.

"Very truly yours,

"(Signed) S. P. GILBERT, JR.,
"Acting Secretary of the Treasury.

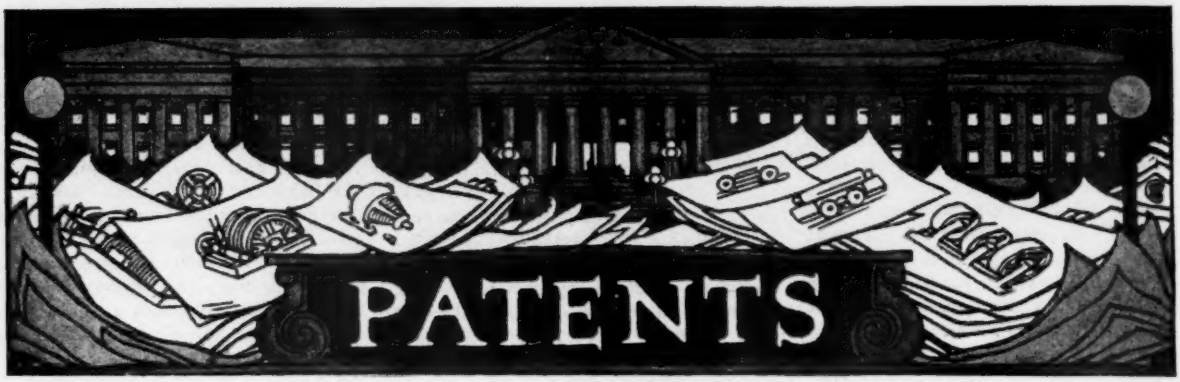
"Hon. Key Pittman, Vice-Chairman, Commission of Gold and Silver Inquiry, United States Senate, Washington, D. C."

MINING IN CALIFORNIA

THE Interior Department announces that, according to information reaching the San Francisco office of the Geological Survey, mining in California during the first half of 1923 has been greatly handicapped by lack of efficient labor and by a very large labor turnover. Considerable development and prospecting work have been done during the first six months of the year in different parts of the State, particularly in the gold districts. Most of the larger gold mines are operating about as they were in 1922, and a few new gold producers have started production. The silver mines have been worked to their full capacity thus far in 1923, but some curtailment of activity in silver mining took place in June. With the resumption of open-market prices for silver it may be expected that the production of that metal will be further reduced. The Engels and Walker mines have been operating at full capacity, and steps have been taken to increase the output at both properties. It is reported that the copper mines in Shasta County and the Calaveras Copper Company may reopen in the near future.

Practically all the lead produced in California is obtained from properties in the southern part of the State, and, though some of these properties have been producing, others have been equipping or building mills and had not begun production during the first half of the year. No zinc mines are in operation.

The output of both gold and silver during the first half of 1923 did not come up to that during the corresponding period in 1922, but the increase in production by the copper and lead mines will probably offset the decrease of silver from the silver mines, so that the output for 1923 will probably about equal that for 1922, which was valued at $21,625,600.



CONDUCTED BY JOHN BOYLE, JR.

1,447,296—*D. T. Day*, Washington, D. C., March 6, 1923.

APPARATUS FOR DISTILLING SHALE comprising a retort, a chamber for holding a bath of oil and having an opening for the introduction of crushed shale, a shale discharge opening for the treated shale, an opening for the gas produced, means for removing shale from said chamber, and a pipe directly connecting said chamber and said retort for conducting directly into said chamber material distilled from shale in said retort.

1,447,297—*D. T. Day*, Washington, D. C., March 6, 1923.

PROCESS FOR RECOVERING OIL FROM SHALE consisting in subjecting the shale to a bath of oil, separating the shale and oil, subjecting the separated shale to heat treatment to drive off volatile matter and passing the volatile matter into the bath of oil, and utilizing the vaporized material as the material of said bath of oil.

1,447,645—*M. F. Chase*, Cleveland, Ohio, *and F. E. Pierce and J. Skogmark*, New York, March 6, 1923, assigned to the Cos Process Company.

ROASTING SULPHUR BEARING MATERIALS, consisting in circulating a gas mixture consisting mainly of sulphur dioxide, oxygen and nitrogen through a furnace and in contact with the ore therein, introducing oxygen to establish in the furnace a reactive medium of greater oxygen content than air, abstracting a relative portion of the mixture from the circulation and controlling the temperature of the gases circulated.

1,448,103—*S. A. Worcester, J. L. Bruce and L. S. Farnham*, Butte, Montana, March 13, 1923.

MINE CAR of the dumping type provided with latching means for holding the outwardly swinging gates and means for positively holding the gate latched against accidental release, provision being made, however, for releasing the latch holding means prior to releasing the latch, provision also being made whereby both said latch and holding means are automatically released when the body is tilted for dumping.

1,448,514—*W. O. Borcherdt*, Austinville, Va., March 13, 1923, assigned to the New Jersey Zinc Company.

WET PROCESS OF CLASSIFYING ORES in which the comminuted material is associated with colloidal constituents, which consists in removing the latter substantially alone from the ore pulp, said removal being preceded by the step of disbursing or deflocculating colloidal matter which would otherwise be present in the pulp in a flocculated condition and thereafter subjecting the remaining ore to wet classification.

1,448,515—*W. O. Borcherdt*, Austinville, Va., March 13, 1923, assigned to the New Jersey Zinc Company.

TREATMENT OF MINERALS. The treated pulp from the above described process is thereafter subjected to a separation treatment in which such colloids as have been removed from the pulp, would, if present, exert a deleterious effect.

1,448,668—*M. P. Lewellen and H. S. Arnold*, Camden, N. J., March 13, 1923.

COAL JIG having an upwardly movable gate adapted to be raised to discharge accumulated rock, a discharge chute for the coal carried by and immovable with respect to said gate, said chute being bodily movable with said gate, together with means including a control out of the path of the coal for vertically adjusting said gate and chute while coal is being discharged.

1,448,758—*F. M. Martin*, New York, March 20, 1923, assigned to American Smelting & Refining Company.

APPARATUS AND METHOD FOR SAMPLING ORES, such as wet concentrates. The invention features the method of first obtaining a constant and uniform flow of the pulp so as to insure that the various samples taken be proportional in weight to the weight of the lots they represent. The stream so formed is then broken up or agitated to minimize the adhesion of the particles for each other, small amounts of the material are withdrawn periodically from the broken-up stream and the material so withdrawn assembled to form a sample of the entire mass treated.

1,448,759—*F. M. Martin*, New York, March 20, 1923, assigned to American Smelting & Refining Company.

APPARATUS FOR DISINTEGRATING ORES.

1,448,760—ORE STREAM HOPPER.

1,448,761—ORE STREAM CONVEYOR.

These inventions relate to a machine for receiving a mass of material which cannot be readily handled, such as wet concentrates, ores, slimes, etc., and features the stream handling elements, the primary objects of the inventions being to provide an apparatus which will feed the material in a constant stream of uniform cross section to insure the feeding of equal amounts in succeeding units of time to prepare the same for a sampling device.

1,448,927—*R. Luckenbach*, Brooklyn, New York, March 20, 1923, assigned to Luckenbach Processes Company.

ADHESIVE COATING FOR ORE RECEIVING SURFACES consisting of petroleum grease and liquified rubber, whereby the mineral values in the pulp will adhere to the coating and the gangue will not.

1,448,928—*R. Luckenbach*, Brooklyn, New York, March 20, 1923, assigned to Luckenbach Processes Company.

METHOD OF CONCENTRATING ORE which comprises mixing the ore with water to form a pulp, directing the pulp to a surface comprising petroleum grease and water to which the mineral contents will adhere and separating the mineral from the material.

1,448,929—*R. Luckenbach*, Brooklyn, New York, March 20, 1923, assigned to Luckenbach Processes Company.

FLOTATION PROCESS using a reagent comprising the reaction product of coal tar and coal tar creosote and a ketone and caustic soda.

1,448,997—*R. Foggan*, Pleasantville, Pa., March 20, 1923.

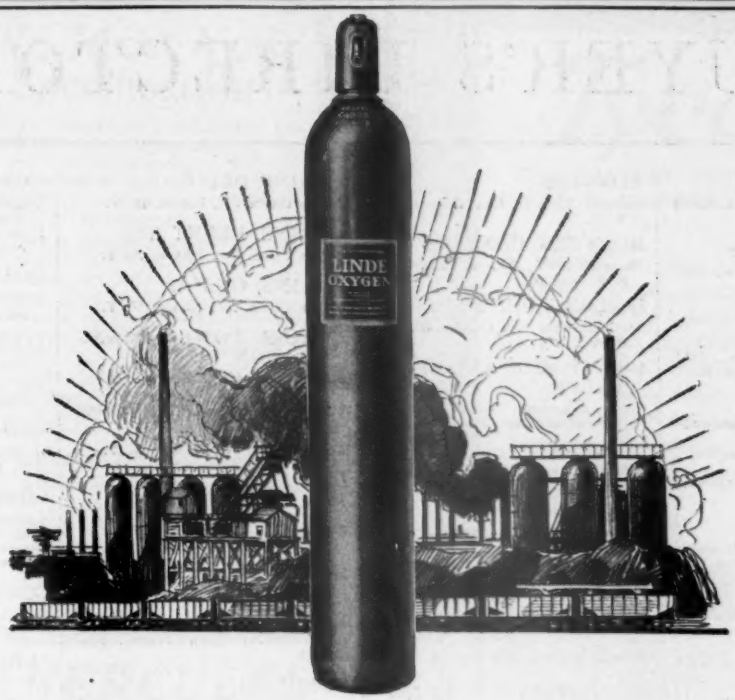
METHOD OF CLEANING OIL WELLS, consisting in forcing a fluid into a liquid solvent in a well below the surface of the solvent at a temperature suitably below the melting point of the substances deposited on the well walls and allowing it to escape so as to agitate the solvent and cause it to move over the walls of the well and wash off the deposit thereon.

1,449,603—*M. Hokanson*, Duluth, Minn., March 27, 1923.

METHOD OF SEPARATING ORES PARTICULARLY, the separation of the gangue, such as silica, alumina, etc., from iron and other ores, and which consists in subjecting the material to an upwardly flowing stream of water of such diameter relative to its velocity as to cause the heavier particles to move radially to the outside of the stream and lighter particles to move inwardly thereof, continuing such flow until the particles of a given grade have moved to the outside of the stream and continuously withdrawing such material and water uniformly around the stream.

1,449,604—*M. Hokanson*, Duluth, Minn., March 27, 1923.

APPARATUS FOR SEPARATING ORES and for carrying out the above described process, including a vessel provided with a portion of increasing diameter to provide an annular chamber in which the solids are deposited by radial separation from the vertical stream, such chamber being provided with a series of outlets uniformly spaced, an annular chamber receiving from said discharge opening, said annular chamber being of progressively decreasing dimensions from one side.



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Allis-Chalmers Mfg. Co., Milwaukee, Wis.

APPLIANCES, ENGINEERING
Lunkenheimer Co., Cincinnati, Ohio.

ARMATURES
General Electric Co., Schenectady, N. Y.

ASSAYERS
Pennsylvania Smelting Co., Pittsburgh, Pa.

AUTOMATIC CAR CAGERS
Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.

AUTOMATIC COAL SKIP
Roberts & Schaefer Co., McCormick Bldg., Chicago, Ill.

AUTOMATIC (Mine Doors, Truck and Electric Switches)
American Mine Door Co., Canton, Ohio.

BAROMETERS
Taylor Instrument Companies, Rochester, N. Y.

BATTERY-CHARGING EQUIPMENT
General Electric Co., Schenectady, N. Y.

BELTING (Conveyor, Elevator, Transmission)
Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.

BELTING, SILENT CHAIN
Morse Chain Co., Ithaca, N. Y.

BINS (Coke and Coal)
Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.

BIT SHARPENERS
Denver Rock Drill Mfg. Co., Denver, Colo.
Ingersoll-Rand Co., 11 Broadway, New York City.

BLASTING POWDER
Hercules Powder Co., 934 King St., Wilmington, Del.

BLASTING SUPPLIES
du Pont Powder Co., The E. I., Wilmington, Del.
Hercules Powder Co., 934 King St., Wilmington, Del.

BLOWERS
General Electric Co., Schenectady, N. Y.

BLOWERS' CENTRIFUGAL
Ingersoll-Rand Co., 11 Broadway, New York City.

BOILER MOUNTINGS
Lunkenheimer Co., Cincinnati, Ohio.

BOILER STOP AND CHECK VALVE
Golden-Anderson Valve Specialty Co., Fulton Bldg., Pittsburgh, Pa.

BOILERS
Allis-Chalmers Mfg. Co., Milwaukee, Wis. (feed pump).

BOXES, JOURNAL
J. R. Fleming & Son Co., Inc., Scranton, Penna.

BREAKERS (Construction and Machinery)
Jeffrey Mfg. Co., Columbus, Ohio.
Vulcan Iron Works, Wilkes-Barre, Pa.
Wilmot Engineering Co., Hazleton, Pa.

BRIQUETTING MACHINERY
Jeffrey Mfg. Co., Columbus, Ohio.
Traylor Eng. & Mfg. Co., Allentown, Penna.

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Jeffrey Mfg. Co., Columbus, Ohio.

CABLES (Connectors and Guides)
American Mine Door Co., Canton, Ohio.

CABLEWAYS
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Lidgerwood Mfg. Co., 96 Liberty St., New York City.

CAGE (Safety Appliances)
Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.

CAGES
Car-Dumper & Equipment Co., Chicago, Ill.
Connellsville Mfg. & Mine Supply Co., Connells ville, Pa.
Holmes & Bros., Robert, Inc., Danville, Ill.
Lidgerwood Mfg. Co., 96 Liberty St., New York City.

CAR CONTROL AND CAGE EQUIPMENT
Car-Dumper & Equipment Co., Chicago, Ill.

CAR DUMPS
Car-Dumper & Equipment Co., Chicago, Ill.

CAR AND CAR WHEELS
Hockensmith Mine Car Co., Penn Station, Pa.

CAR-HAULS
Car-Dumper & Equipment Co., Chicago, Ill.

CASTINGS
Jeffrey Mfg. Co., 958 N. Fourth St., Columbus, Ohio.

CHAINS
Jeffrey Mfg. Co., Columbus, Ohio.
Morse Chain Co., Ithaca, N. Y.

CHAINS, AUTOMOBILE ENGINE
Morse Chain Co., Ithaca, N. Y.

CHAINS, DRIVE
Morse Chain Co., Ithaca, N. Y.

CHAINS, FRONT END
Morse Chain Co., Ithaca, N. Y.

CHAINS, OILING
Morse Chain Co., Ithaca, N. Y.

CHAINS, POWER TRANSMISSION
Morse Chain Co., Ithaca, N. Y.

CHAINS, SILENT (Rocker-Joint)
Morse Chain Co., Ithaca, N. Y.

CHAINS, SLING
Morse Chain Co., Ithaca, N. Y.

CHAINS, SPROCKET WHEEL
Morse Chain Co., Ithaca, N. Y.

CHEMICALS
Roessler & Hasslacher Chemical Co., 709-717 Sixth Avenue, New York.

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Hunt, Robt., & Co., Insurance Exchange, Chicago, Ill.

CIRCUIT BREAKERS
General Electric Co., Schenectady, N. Y.

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Ohio Brass Co., Mansfield, Ohio.

CLUTCHES
Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.

COAL COMPANIES
Clinchfield Coal Corp., Dante, Va.
Lehigh Coal & Navigation Co., Philadelphia, Pa.
Stonega Coal & Coke Co., Philadelphia, Pa.
Thorne, Neale & Co., Philadelphia, Pa.
Wholesale Coal Co., Pittsburgh, Pa.

COAL CRUSHERS
Connellsville Mfg. & Mine Supply Co., Connellsville, Pa.
Jeffrey Mfg. Co., Columbus, Ohio.

COAL CUTTERS
Goodman Mfg. Co., Chicago, Ill.
Ingersoll-Rand Co., 11 Broadway, N. Y.
Jeffrey Mfg. Co., Columbus, Ohio.

COAL DRYING PLANTS
Roberts & Schaefer Co., Wrigley Bldg., Chicago, Ill.

COAL HANDLING MACHINERY
Jeffrey Mfg. Co., Columbus, Ohio.
Lidgerwood Mfg. Co., 96 Liberty St., New York City.
Roberts & Schaefer Co., Wrigley Bldg., Chicago, Ill.

COAL MINING MACHINERY
Allis-Chalmers Mfg. Co., Milwaukee, Wis.
Goodman Mfg. Co., Chicago, Ill.
Ingersoll-Rand Co., 11 Broadway, New York City.
Jeffrey Mfg. Co., Columbus, Ohio.
Roberts & Schaefer Co., Wrigley Bldg., Chicago, Ill.

COAL MINE POWER PLANTS
Roberts & Schaefer Co., Wrigley Bldg., Chicago, Ill.

COAL MINING PLANTS
Ingersoll-Rand Co., 11 Broadway, New York City.
Roberts & Schaefer Co., Wrigley Bldg., Chicago, Ill.

COAL WASHING PLANTS
Roberts & Schaefer Co., Wrigley Bldg., Chicago, Ill.

COCKS (Locomotive, Cylinder and Gauge)
The Lunkenheimer Co., Cincinnati, Ohio.

COILS (Choke)
General Electric Co., Schenectady, N. Y.

COMPRESSORS, AIR
General Electric Co., Schenectady, N. Y.
Ingersoll-Rand Co., 11 Broadway, New York City.

COMPRESSORS, MINE CAR
Ingersoll-Rand Co., 11 Broadway, New York City.

CONCENTRATORS (Table)
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CONCRETE REINFORCEMENT
American Steel & Wire Co., Chicago and New York.

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Allis-Chalmers Mfg. Co., Milwaukee, Wis.
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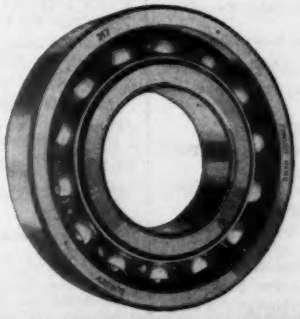

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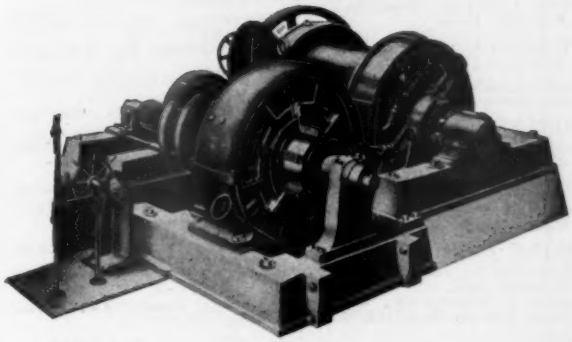

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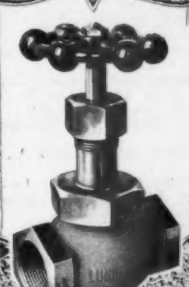

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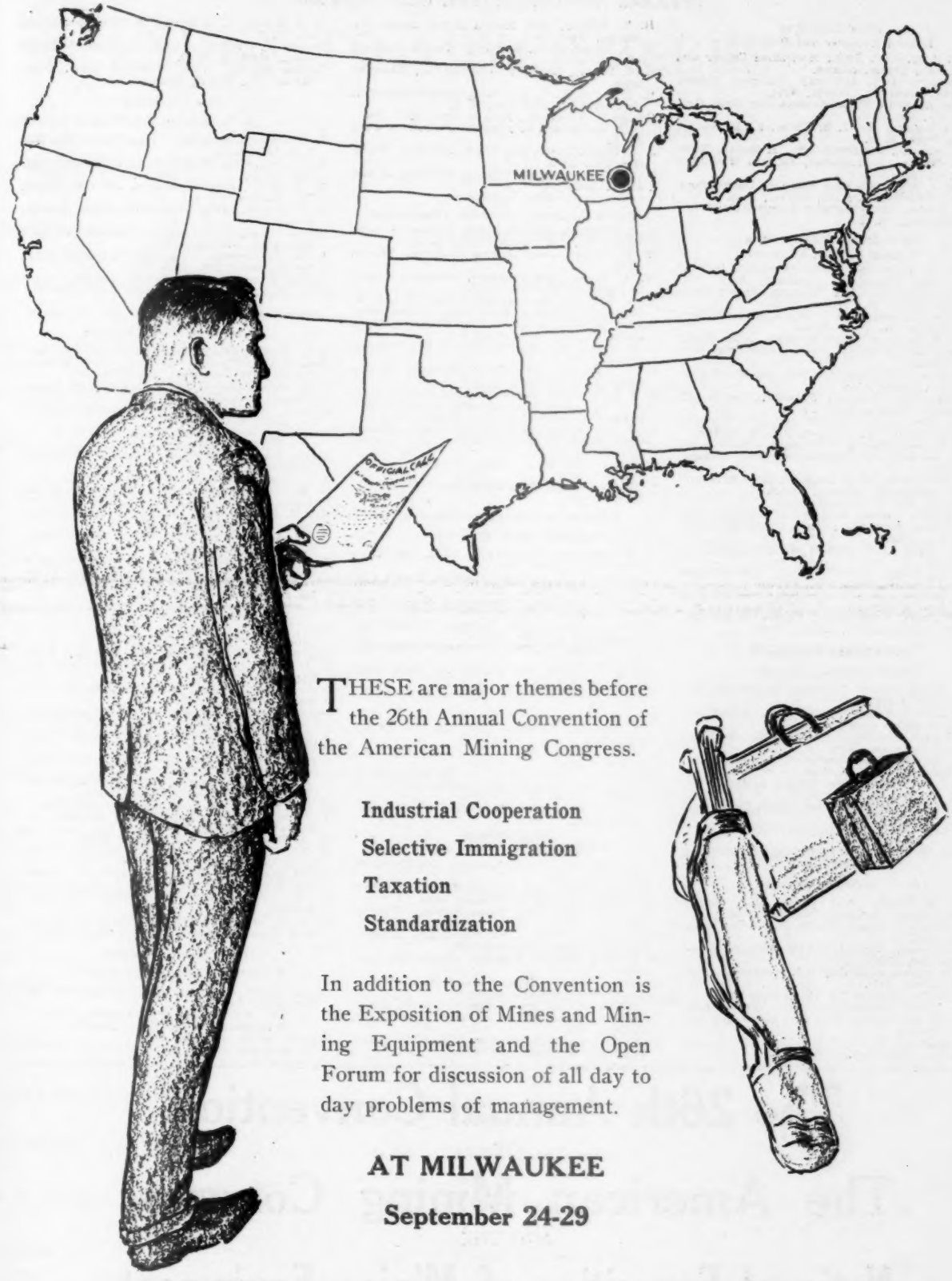

THESE are major themes before the 26th Annual Convention of the American Mining Congress.

Industrial Cooperation
Selective Immigration
Taxation
Standardization

In addition to the Convention is the Exposition of Mines and Mining Equipment and the Open Forum for discussion of all day to day problems of management.

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September 24-29

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The 26th Annual Convention

OF

The American Mining Congress

AND THE

National Exposition of Mining Equipment

Milwaukee, Wisconsin

September, 24-29, 1923

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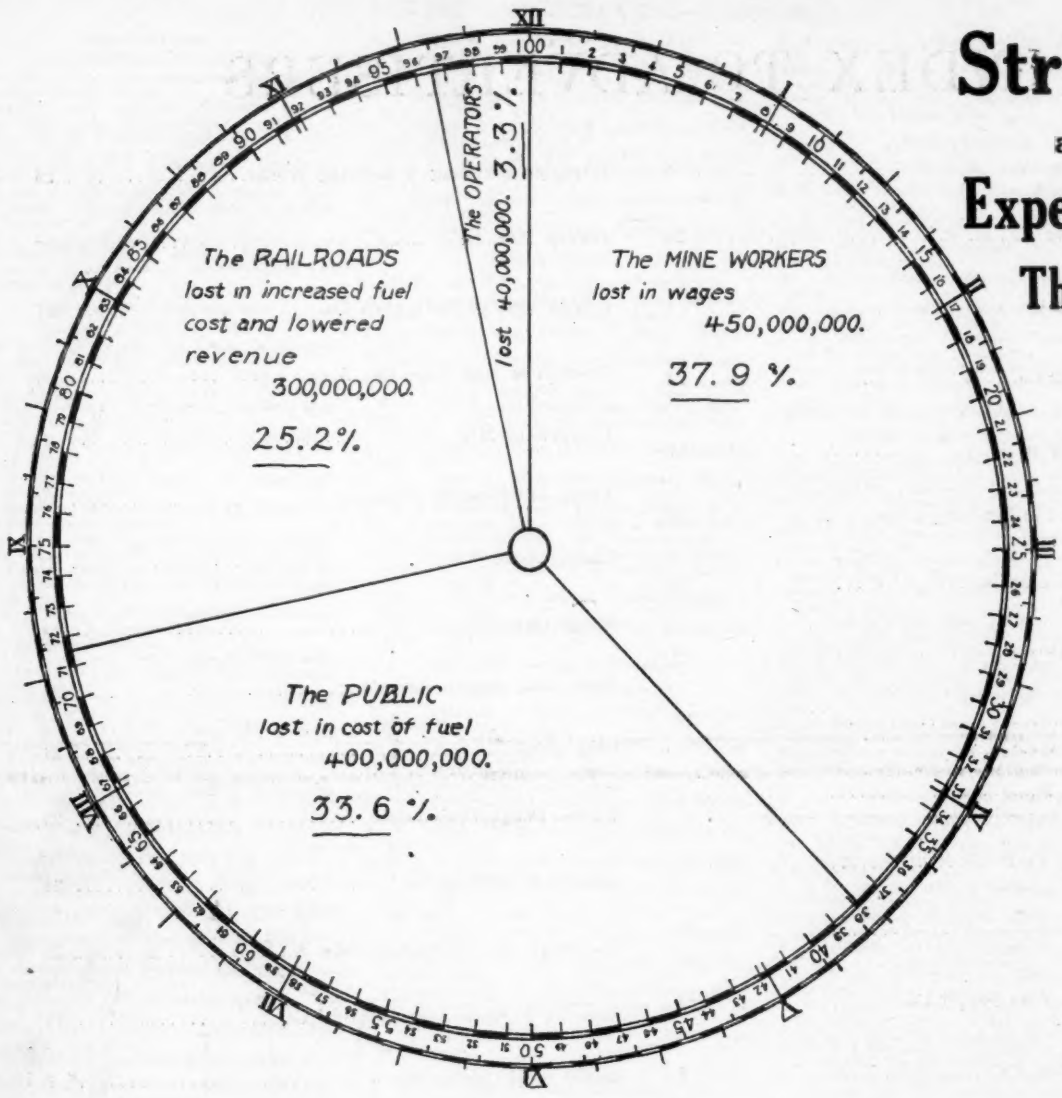
Strikes are Expensive Things



The Major Mine Strikes of 1921 Cost:

The Mine Workers - - -	$450,000,000
The Railroads - - - - -	300,000,000
The Public - - - - - - -	400,000,000

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These chains have been installed between four and five years—12 of them in daily service.

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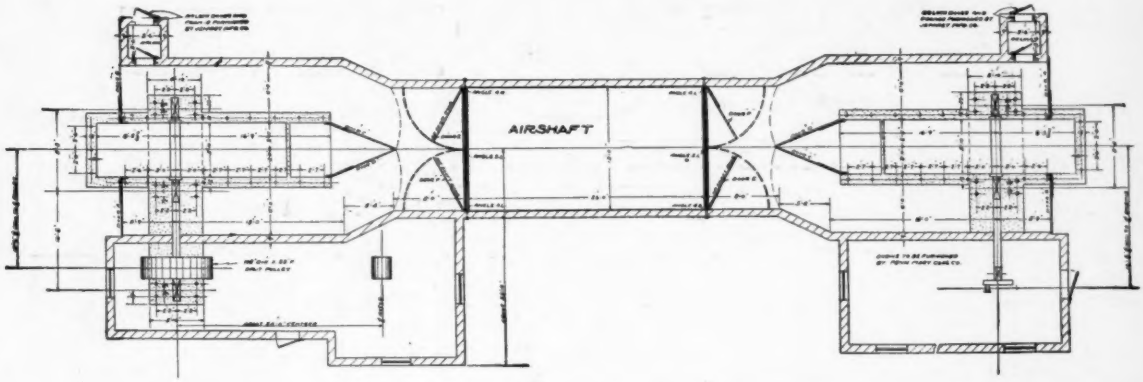

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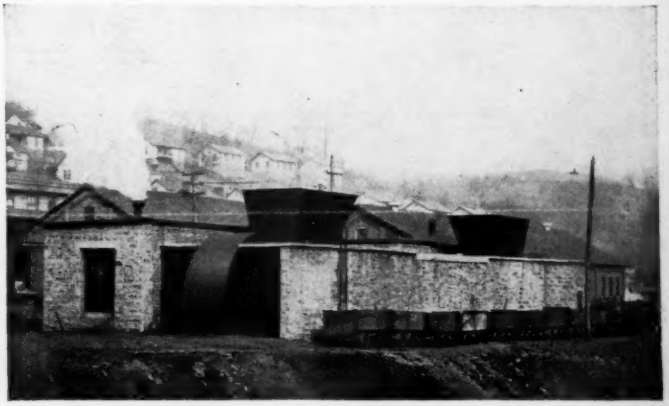

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In the line drawing above the doors are shown at the top of the air shaft which swing toward each fan. When one fan is being slowed down and the other accelerated, the doors will automatically change positions due to the unequal pressure.

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